

*SC NAACP v. Alexander,*  
D.S.C. Case No. 3:21-cv-03302-MGL-TJH-RMG

# EXHIBIT C

1 UNITED STATES DISTRICT COURT  
2 FOR THE DISTRICT OF SOUTH CAROLINA  
3 COLUMBIA DIVISION  
4 THE SOUTH CAROLINA STATE CONFERENCE OF THE  
5 NAACP, et al.,

6 Plaintiffs,

7 vs. CASE NO. 3:21-CV-03302-JMC-TJH-RMG

8 THOMAS C. ALEXANDER, et al.,

9 Defendants.

10 VIDEOCONFERENCE VIDEOTAPE  
11 DEPOSITION OF: SEAN TRENDE  
12 (Attending by VTC)  
13 DATE: April 5, 2022  
14 TIME: 10:06 a.m.  
15 LOCATION: 1146 Elderberry Loop  
Delaware, Ohio

16 TAKEN BY: Counsel for the Plaintiff

17 REPORTED BY: Julie L. Bonomo  
18 (Attending by VTC)

---

1 APPEARANCES OF COUNSEL:

2 ATTORNEYS FOR PLAINTIFF

3 THE SOUTH CAROLINA STATE CONFERENCE OF  
4 THE NAACP, et al.:

5 AMERICAN CIVIL LIBERTIES UNION

6 BY: SOMIL TRIVEDI  
7 (Attending by VTC)

8 PATRICIA YAN  
9 (Attending by VTC)

10 915 15th Street, NW  
11 Washington, DC 20005  
12 202-715-0802  
13 Strivedi@aclu.org

14 pyan@acly.org

15 AMERICAN CIVIL LIBERTIES UNION

16 BY: ADRIEL I. CEPEDA DERIEUX  
17 (Attending by VTC)

18 SAMANTHA OSAKI  
19 (Attending by VTC)

20 125 Broad Street  
21 New York, New York 10004  
22 212-284-7334

23 acepedaderieux@aclu.org

24 NAACP LEGAL DEFENSE AND EDUCATIONAL  
25 FUND, INC.

BY: JOHN S. CUSICK  
(Attending by VTC)

40 Rector Street, 5th Floor  
New York, New York 10006  
917-858-2870  
Jcusick@naacpldf.org

NAACP LEGAL DEFENSE AND EDUCATIONAL  
FUND, INC.

BY: ANTONIO L. INGRAM, II  
700 14th Street  
Suite 600

Washington, D.C. 20005  
202-682-1300

aingram@naacpldf.org

ATTORNEYS FOR THE DEFENDANT

HOUSE DEFENDANTS JAMES LUCAS, CHRIS  
MURPHY, AND WALLACE JORDAN:

NEXSEN PRUET, LLC

BY: KONSTANTINE DIAMADUROS

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

(Attending by VTC)  
ANDREW MATHIAS  
(Attending by VTC)  
104 South Main Street  
Suite 900  
Greenville, South Carolina 29601  
864-370-2211  
kdiamaduros@nexsenpruet.com  
amathias@nexsenpruet.com  
ATTORNEYS FOR THE DEFENDANT  
SENATE DEFENDANTS THOMAS ALEXANDER AND  
LUKE RANKIN:  
JONES DAY  
BY: STEPHEN J. KENNY  
(Attending by VTC)  
JOHN M. GORE  
(Attending by VTC)  
51 Louisiana Avenue NW  
Washington, DC 20001  
202-879-3667  
skenny@joesday.com  
ATTORNEYS FOR THE  
SOUTH CAROLINA ELECTION COMMISSION:  
BURR & FOREMAN, LLP  
BY: JANE W. TRINKLEY  
(Attending by VTC)  
1221 Main Street  
Suite 1800  
Columbia, South Carolina 29201  
803-799-9800  
Jtrinkley@burr.com  
ALSO PRESENT:  
ROOSEVELT HARRISON, LEGAL VIDEOGRAPHER  
(INDEX AT REAR OF TRANSCRIPT)

1 THE VIDEOGRAPHER: We are now on the  
2 record. The time on the monitor is 9:05 a.m.  
3 Eastern Standard time. Today's date is April 5,  
4 2022. This is the video recorded deposition of  
5 Mr. Sean Trende, in the matter of the South  
6 Carolina State Conference of the NAACP, et al,  
7 versus Thomas C. Alexander, et al.

8 This deposition is being held remotely  
9 via Zoom.

10 Counsel, please introduce yourselves,  
11 after which the court reporter will swear in the  
12 witness.

13 MR. TRIVEDI: Somil Trivedi from the  
14 American Civil Liberty Union Foundation for the  
15 Plaintiffs.

16 MR. DIAMADUROS: Konstantine  
17 Diamanduros, on behalf of the House Defendants,  
18 James Lucas, Chris Murphy, and Wallace Jordan. In  
19 the room with me is my colleague, Andrew Mathias,  
20 also on behalf of House Defendants.

21 MS. TRINKLEY: Jane Trinkley on behalf  
22 of Election Commission.

23 MR. KENNY: Stephen Kenny on behalf of  
24 the Senate Defendants, Thomas Alexander and Luke  
25 Rankin.

1 MS. YAN: Patricia Yan of the American  
2 Civil Liberty Union for the Plaintiffs.

3 MR. CUSICK: John Cusick on behalf of  
4 the Plaintiffs at the NAACP Legal Defense  
5 Educational Fund.

6 MR. DERIEUX: Hi. This is Adriel  
7 Cepada Derieux of the American Civil Liberties  
8 Union for the Plaintiffs.

9 MS. OSAKI: Hi. This is Samantha Osaki  
10 with the ACLU. Also for the Plaintiffs.

11 THE COURT REPORTER: Is that everyone?

12 MR. TRIVEDI: Seems like it.

13 THE COURT REPORTER: I'll swear in the  
14 witness then.

15 SEAN TRENDE  
16 being first duly sworn, testified as follows:

17 EXAMINATION

18 BY MR. TRIVEDI:

19 Q. Thank you, Mr. Trende. Good morning.

20 A. Good morning.

21 Q. Would you mind stating your full name  
22 for the record please?

23 A. Sean Patrick Trende.

24 Q. And you understand that you're  
25 testifying under oath today?

1 A. Yes.

2 Q. And is there anything before we get  
3 started that might prevent you from understanding  
4 my questions or answering them truthfully today?

5 A. No.

6 Q. Okay. So let's go over a few ground  
7 rules for this deposition, so we all have the same  
8 understanding of things. Is that all right?

9 A. Sure.

10 Q. In this deposition, I will be asking  
11 you questions. My questions and your answers will  
12 be recorded by the court reporter for the  
13 transcript.

14 Does that make sense?

15 A. Yes.

16 Q. So especially because we're over Zoom,  
17 you'll need to speak up and answer clearly so the  
18 reporter can take down your responses, just like I  
19 will have to do the same for my questions.

20 The reporter won't be able to record a  
21 nod, or a shake of your head, or uh-huh.

22 Do you understand that?

23 A. Yes.

24 Q. The court reporter is also going to  
25 have trouble if we talk over each other. So it's

1 person that you wait for me to finish a question  
2 entirely before you begin answering, even if you  
3 think you know what the rest of the questions might  
4 be. This is especially important, again, because  
5 we are over video, and there maybe a lag at times.

6 Is that all right with you?

7 A. Yes.

8 Q. And similarly, I'll do my best to make  
9 sure that I let you completely answer questions  
10 before asking about them.

11 Is that okay?

12 A. Yes.

13 Q. Okay. From time to time I might ask a  
14 question that you don't understand maybe because of  
15 how I phrased it or because my audio cut out. If  
16 you don't understand the question for any reason,  
17 just ask me to repeat it and I'll do it.

18 Is that all right?

19 A. Yes.

20 Q. As I mentioned a second ago, sometimes  
21 there are tech issues especially over Zoom. There  
22 might be background noise, static or lag. If you  
23 experience any of that, just let everybody know,  
24 and we will either fix it in real time or go off  
25 the record to fix it. We don't want a garbled



1 transcript if there are tech issues.

2 Is that good?

3 A. Yes.

4 Q. Okay. Just to go back to your oath for  
5 a second. You understand that you have taken an  
6 oath just now, correct?

7 A. Yes.

8 Q. And that requires you to tell the  
9 truth, the whole truth, and nothing but the truth,  
10 is that right?

11 A. Yes.

12 Q. So that is the same oath that you would  
13 take if we were sitting in court today.

14 Do you understand that?

15 A. Yes.

16 Q. Okay. If you need to take a break at  
17 any point, for any reason, just tell me or your  
18 attorney and we'll finish this question or maybe  
19 the line of questions that I'm on. And then we'll  
20 take a break.

21 Is that fine?

22 A. Yes.

23 Q. Okay. And the local rules dictate that  
24 during those breaks you can't speak to your  
25 attorney about anything substantive about the

1 deposition.

2 Do you understand that?

3 A. Yes.

4 Q. Okay. Speaking of your attorneys,  
5 during this deposition, they may object to  
6 questions of mine. If they object, unless they  
7 instruct you not to answer or the attorneys are  
8 having some kind of back and forth about the  
9 question, you are supposed to go ahead and answer.  
10 They have simply lodged their objection for the  
11 record.

12 Is that okay with you?

13 A. Yes.

14 Q. Okay. You may also at some point give  
15 an answer to a question and later remember  
16 additional information or want to clarify  
17 something. If that happens, just tell me that you  
18 would like to add something to an earlier answer  
19 and we'll address it.

20 Will you do that?

21 A. Yes.

22 Q. Okay. Similarly, if you realize you  
23 said something inaccurate, you can just tell me and  
24 we'll clear it up.

25 Is that alright?

1 A. Yes.

2 Q. Okay. So I think I know this answer to  
3 this, but have you been deposed before?

4 A. Yes.

5 Q. Approximately how many times?

6 A. 15 to 20 maybe.

7 Q. When was the most recent time?

8 A. Probability in the Maryland  
9 redistricting case but, I don't know the exact  
10 chronology.

11 Q. Was it this year?

12 A. Yes.

13 Q. Okay. Turning to this case now, you  
14 understand that this case broadly alleges racial  
15 gerrymandering and potential discrimination against  
16 state officials who created the South Carolina  
17 State House Redistricting Map?

18 A. About the racial gerrymandering claim.  
19 I don't know anything about the intent issue.

20 Q. Do you understand that racial  
21 gerrymandering and potential discrimination are the  
22 claims that the Plaintiffs have brought in this  
23 case?

24 A. I didn't receive the Complaint, so I  
25 didn't actually know. If you had asked me is this

1 an intention discrimination case, I would say that  
2 I don't know. I only about that it was a Shaw  
3 case.

4 Q. Do you understand that the map that  
5 we're discussing relates to the state house in  
6 South Carolina?

7 A. Yes.

8 Q. Do you know that it was passed into law  
9 under a bill called House Bill 4493 or H4493?

10 A. No.

11 Q. What I'm trying to get at is that we  
12 are talking about the same map. So in your expert  
13 report you refer to something called the enacted  
14 map. Is it your understanding that the enacted map  
15 is the map that was passed in 2021 by the state  
16 legislature and signed by the governors that now  
17 applied to the state house of representatives in  
18 South Carolina?

19 A. Yes.

20 Q. So for the rest of this deposition I'm  
21 going to refer to that as the enacted map just like  
22 you do in your report, for ease of use.

23 Is that okay?

24 A. Yes.

25 Q. Okay. And you understand that the

1 enacted map is the one that's at issue in the  
2 litigation?

3 A. Yes.

4 (EXHIBIT 1, Amended Deposition Notice,  
5 was marked for identification.)

6 BY MR. TRIVEDI:

7 Q. Okay. I'm going to pull up an exhibit  
8 over screen share and there might be a lag so tell  
9 me when you see it?

10 A. I see it.

11 Q. Great. Now this is difficult over Zoom  
12 because I control the document. But do you  
13 recognize this document?

14 A. No.

15 Q. Can you read what's there in the bold  
16 all caps and underlined in the middle of page?

17 A. Deposition of Sean Trende.

18 Q. Okay. Do you know what a Deposition  
19 Notice is?

20 A. Yes.

21 Q. Okay. Do you understand this to be a  
22 Deposition Notice of you?

23 A. Yes.

24 Q. Okay. I stopped sharing. So you said  
25 a moment ago you didn't recognize it. You haven't

1       seen this document before today?

2               A.     It may have been sent by counsel, but I  
3       had the date. That's what was important to me.

4               Q.     You understand that you have been  
5       designated an expert in this case; is that right?

6               A.     Yes.

7               Q.     Okay. And when I say, "this case," I  
8       mean the case regarding the state house map and not  
9       any other map. Is that your understanding?

10              A.     Yes.

11              Q.     Not for congress, for example?

12              A.     Yes, I understand that.

13                     (EXHIBIT 2, Trende Report and CV, was  
14       marked for identification.)

15       BY MR. TRIVEDI:

16              Q.     I'm going to pull up another document  
17       now just for a moment because I do think you'll  
18       recognize this one. Okay. Can you read what is in  
19       the middle of the page, in all caps, bold and  
20       underlined, please?

21              A.     Rebuttal Expert Report for Sean P.  
22       Trende.

23              Q.     I know you can't see ever page right  
24       now, but do you recognize this document, as I  
25       scroll through it?

1 A. Yes. Yes.

2 Q. What is it?

3 A. It is the expert report that I wrote  
4 for this case. At least the first five pages of  
5 it.

6 Q. I'm going to take this down now, but  
7 just know that I'm going to refer to it at many  
8 times during the deposition. If there is ever a  
9 time where I'm at a part of the deposition or I'm  
10 sorry a part of the report, that you would like to  
11 see on the screen, I can do that.

12 Is that okay?

13 A. Yeah. I have my own copy.

14 Q. Great. That is all.

15 You submitted this report on February  
16 10, 2022; is that right?

17 A. Yes.

18 Q. When did you start writing it?

19 A. I don't know.

20 Q. Would you say you started writing it on  
21 2022?

22 A. Certainly.

23 Q. So not as early as 2021?

24 A. No, I did not write it in 2021.

25 Q. Did you start it in February of 2022?

1           A.     Would either be late January report  
2     early February.

3           Q.     What materials did you rely on to write  
4     your report?

5           A.     The materials referenced in the report  
6     and produced Plaintiffs to my knowledge or  
7     recollection.

8           Q.     Did you produce to the Plaintiffs every  
9     material that you relied on for your report?

10          A.     I think every substantive material and  
11     I didn't consciously withhold anything.

12          Q.     What do you mean by "substantive?"

13          A.     There is always stuff you rely on that,  
14     you know, you have learned in other classes, you  
15     have read in articles, that give you background  
16     information. But by substantive, I mean the stuff  
17     that goes into actual substance of the report.

18          Q.     Are there any documents you created, or  
19     the spreadsheets, or notes that you used while  
20     creating the report that you didn't turn over?

21          A.     I don't think so.

22          Q.     Any computer code that you employed in  
23     the making of your report that you didn't turn  
24     over?

25          A.     I don't believe so.



1 Q. Any there documents referenced in your  
2 report that you didn't turn over?

3 A. I mean, the citations.

4 Q. Anything else?

5 A. I'm saying I have to look at the  
6 citations. So, for example, Paragraph 43 I  
7 reference the McCartan and Imai article. I didn't  
8 produce that article because it's publically  
9 available, so things of that nature I didn't  
10 produce.

11 Q. Sure.

12 A. I didn't consciously withhold anything,  
13 if that's what you're getting at.

14 Q. When about did you turn these materials  
15 over to counsel? Without revealing anything  
16 privileged about any conversation with counsel.

17 A. I believe it was whenever the case came  
18 back to life in my deposition. Well, I guess it's  
19 always been the life for you all. But for me when  
20 it came back to life, and the deposition was back  
21 on, I started turning things over.

22 Q. When about was that?

23 A. I mean, so last week I was in Iceland,  
24 so the week before, the week before that.

25 Q. Okay. Did you turn over any materials

1 in the last week?

2 A. No. Oh, no. That's not true because I  
3 gave some documents last night. So those documents  
4 last night.

5 Q. Were those documents that you either  
6 relied on or referenced in your report?

7 A. There were two shape files that were  
8 publically available that I hadn't turned over, and  
9 there was a GOJ san (ph) that I forgot was in the  
10 code, but I guess it is not referenced in the  
11 report, so the answer to your question would be no.

12 Q. Was it relied on in the report?

13 A. It was relied on indirectly through the  
14 code, but it is not relied on directly in the  
15 report.

16 Q. But you used the code in the report,  
17 correct?

18 A. Yes.

19 Q. Again, without revealing any privileged  
20 communications, who did you speak to in creating  
21 your report?

22 A. Attorneys at Nexsen Pruet.

23 Q. Any other defense experts in this case?

24 A. Not about this report, no.

25 Q. Did you speak to any of the names

1 Defendants?

2 A. I don't even know who those are so no.

3 Q. Any members of the South Carolina State  
4 House?

5 A. No.

6 Q. Other members of the South Carolina  
7 Legislature?

8 A. No.

9 Q. The person or people who created the  
10 enacted map?

11 A. Yeah, no members of the legislature, so  
12 no.

13 Q. Well any third parties who might have  
14 helped create the enacted map, you didn't speak  
15 with them either?

16 A. No.

17 Q. When you say you spoke with attorneys  
18 at Nexsen Pruet, again, I want to be clear. I  
19 don't want you to reveal anything privileged. But  
20 about how many times did you meet with them?

21 A. I don't know. I could only guess. It  
22 was a long time ago.

23 Q. So I think you said a moment ago that  
24 you started writing this in maybe late January, is  
25 that what you mean by a long time ago?

1           A.     Yeah, for me that's a long time ago.  
2     Right now it's been crazy.

3           Q.     Okay. Did you -- would you say you met  
4     with them more than five times?

5           A.     Most likely. I mean --

6           Q.     More than --

7           A.     I'm sorry, but I want to clarify. By  
8     meeting, do you mean like a generic phone  
9     conversation, or do you mean a large-scale  
10    conference call?

11          Q.     I mean any type of communication at  
12    whatever length?

13          A.     But not e-mail?

14          Q.     I can ask about that in a moment.

15          A.     Okay. You said any conversation -- any  
16    type of communication. E-mail is communication,  
17    but I wouldn't consider it a meeting, as long as  
18    we're agreed on that.

19          Q.     How many times did you call Nexsen  
20    Pruet attorneys on the phone?

21          A.     I don't know.

22          Q.     Was it more than five?

23          A.     Almost certainly.

24          Q.     Was it more than ten?

25          A.     Probably.

1 Q. Was it more than 15?

2 A. I couldn't say.

3 Q. How many times approximately did you  
4 e-mail with them?

5 A. Dozens.

6 Q. And how many times did you meet in  
7 person?

8 A. Never.

9 Q. So for the phone conversations, I think  
10 you said there were dozens of them?

11 A. I think I said dozens of e-mails.

12 Q. Oh, I'm sorry. You're right. You said  
13 -- you said probably more than ten, but you  
14 couldn't say if it was more than 15 phone  
15 conversations; is that right?

16 A. That's right.

17 Q. Okay. What was the range of length of  
18 these calls? I think you mentioned a minute ago  
19 that it might have been a two-minute conversation,  
20 it might have been a longer meeting. Of the tens  
21 of 15 phone calls, how many were shorter than half  
22 an hour?

23 A. I don't know.

24 Q. How many were longer than half an hour?

25 A. I don't know.

1 Q. Were any of them longer than half an  
2 hour?

3 A. Most likely.

4 Q. Were any of them longer than an hour?

5 A. No clue.

6 Q. Okay. We talked a moment ago about  
7 documents you relied on to create your report.

8 Did you review any documents before  
9 starting to write your report?

10 A. Obviously the documents referenced in  
11 the report, and the expert reports of the  
12 Plaintiffs. Well, I shouldn't say that. I read  
13 Imai and Ragusa reports and skimmed the Duchin and  
14 I can't remember the name of the VRA expert, the  
15 racial polarization expert.

16 Q. Is that Baodong Liu?

17 A. That sounds right.

18 Q. You skimmed that one?

19 A. Yes.

20 Q. Just because we're on Zoom, and in  
21 different locations, do you have any documents in  
22 front of you today?

23 A. I have my expert report open.

24 Q. Okay. Could you just show us for the  
25 record on the video? Oh. I'm sorry. You have it

1 open on your desktop?

2 A. Yeah.

3 Q. Okay.

4 A. I don't have any paper in front of me.  
5 Well, I mean, I have all kinds of paper, but  
6 nothing to rely on.

7 Q. Okay. Have you discussed this case  
8 with any one except your attorneys?

9 A. Probably my wife.

10 Q. Anyone else?

11 A. Not in a substantive sense. I'm sure  
12 for other cases, I'm not even sure I mentioned it  
13 in passing with other cases.

14 Q. What about other --

15 A. May --

16 Q. I'm sorry. Go ahead.

17 A. Well, if you want to schedule something  
18 and something else is scheduled, you might say,  
19 "No, I can't do that. We had an old deposition  
20 scheduling." So I may have said something like  
21 that. I think in my deposition in Maryland when we  
22 were going through cases this one came up, although  
23 at the time the litigation was stayed. So there  
24 was no substantive discussion of it. That nature.

25 Q. So in the Maryland case you discussed

1 this case with the attorneys in the Maryland case?

2 A. In the deposition, when they do the  
3 walkthrough of the cases you have been in, this  
4 case came up. But at the time it was stayed, so  
5 there wasn't much to discuss.

6 Q. Has this case come up in other  
7 depositions that you have been in?

8 (Technical interference)

9 Q. Oh, I'm sorry. Sean, I think your  
10 sound just cut out for me.

11 A. The answer is I don't know.

12 Q. Okay.

13 A. Well, the answer is I don't know.

14 Q. Okay. Sorry about that.

15 So any other times that you can recall  
16 that you spoke to other people about this case?

17 A. No.

18 Q. Who first told you that this lawsuit  
19 had been filed?

20 A. An attorney with Nexsen Pruet.

21 Q. When was that?

22 A. Probably January.

23 Q. Of 2022?

24 A. Yes.

25 Q. Who first told you that your deposition



1 had been requested?

2 A. Probably Mr. Mathias.

3 Q. Do you mean Andrew Mathias, your  
4 attorney?

5 A. Mathias, yes.

6 Q. When was that approximately?

7 A. It would have been whenever you all --  
8 whenever Plaintiffs noticed my deposition the first  
9 time.

10 Q. Aside from everything we have discussed  
11 to this point, did you do anything else to prepare  
12 your deposition?

13 A. I had a conversation with counsel  
14 yesterday, and I reviewed my expert report.

15 Q. How long was that conversation with  
16 counsel yesterday?

17 A. Perhaps 45 minutes. I was in the car.

18 Q. So that was over the phone?

19 A. Yes.

20 Q. Are you being compensated by any one  
21 for being here today?

22 A. I hope so.

23 Q. Well, are you?

24 A. I hope so I haven't received a check  
25 yet.

1 Q. Are you under a contract to be  
2 compensated?

3 A. Yes.

4 Q. By whom?

5 A. I believe it's with -- the contract is  
6 with Nexsen Pruet.

7 Q. Do you expect to be compensated to  
8 testify at trial in this case, if we go to trial?

9 A. If I'm called as a witness, I would  
10 hope so.

11 Q. And who in this case --

12 A. I have been -- I have been stiffed  
13 before so...

14 Q. Sorry for that. If you are  
15 compensated, who would do the compensating?

16 A. I would assume Nexsen Pruet.

17 Q. Now we're doing to move to some  
18 personal background.

19 Have you ever gone by any other names?

20 A. No.

21 Q. What is your date of birth?

22 A. January 6, 1973.

23 Q. What is your address?

24 A. 1146 Elderberry, E-L-D-E-R-B-E-R-R-Y,  
25 Loop, Delaware, Ohio 43015.

1 Q. Do you have e-mail accounts?

2 A. Yes.

3 Q. How many?

4 A. Goodness, I don't even know. There are  
5 three that I have in my Outlook that I use, and a  
6 Gmail that I occasionally use.

7 Q. Can you tell us -- can you spell out  
8 those e-mail addresses?

9 A. So the spelling of my name, since I  
10 don't think we got that is Sean, S-E-A-N  
11 T-R-E-N-D-E. So there is SeanTrende@hotmail.com.  
12 There is Trende.30@oc.edu, and then there is  
13 Strende@realclearpolitics. That is all one word,  
14 R-E-A-L-P-O-L-I-T-I-C-S. No. R-E-A-L-C-L-E-A-R  
15 and then politics.com.

16 Q. And the Gmail?

17 A. TrendeSean@Gmail.com.

18 I think there are other ones floating  
19 around out there that over the years, but those are  
20 the ones that I could log into if I wanted to.

21 Q. So which of those have you used for  
22 work on this case?

23 A. I believe the  
24 STrende@RealClearPolitics. There may have been  
25 some things for -- that came through on the OSU

1 account. People sometimes contact me initially  
2 through that, but that's not my main account.

3 Q. So what is your main account?

4 A. RealClearPolitics account.

5 Q. Okay. And that is the one that used in  
6 the e-mails that you said you sent back and forth  
7 with your attorneys?

8 A. Yes. Unless something came in  
9 initially through the OSU account.

10 Q. Did you use -- I'm sorry.

11 Did you search both of OSU account and  
12 the RealClearPolitics account for documents you  
13 relied on this in case so that you could turn them  
14 over to Plaintiffs?

15 A. No.

16 Q. Did you send texts related to work on  
17 this case?

18 A. I think -- I don't know actually. I  
19 don't know.

20 Q. Do you think it's likely?

21 A. I think it's likely, but I'm not sure.

22 Q. Have you checked?

23 A. No.

24 Q. All right. If you sent them, with whom  
25 did you correspond by text?

1 A. They would have been with counsel.

2 Q. Only counsel?

3 A. Only counsel.

4 Q. Do you have any personal social media  
5 accounts like Facebook and twitter?

6 A. Yes.

7 Q. What accounts are those?

8 A. I have my personal Facebook account in  
9 my name. There is an old business one for  
10 realclearpolitics that I'm not sure I can log into  
11 anymore. It's probably haven't logged into it in  
12 six years, and then there is my Twitter feed.

13 Q. What is the full name on the Facebook  
14 account?

15 A. I believe it's just Sean Trende.

16 Q. What is the handle on the Twitter  
17 account?

18 A. The -- if you look, it's  
19 Twitter.com/SeanTrende, one word. And I think  
20 SeanT@RCP is what shows right now as the handle.

21 Q. Do you have control over any other  
22 social media accounts that are not in your name?

23 A. No.

24 Q. Okay. I want to move to your  
25 educational background.

1                   You're get ago Ph.D. political science;  
2           is that right?

3           A.     Correct.

4           Q.     It says in your expert report that you  
5           expect to receive your Ph.D. in May 2022; is that  
6           right?

7           A.     Correct.

8           Q.     So that's next month, correct?

9           A.     Correct.

10          Q.     So have you already defended your  
11         dissertation?

12         A.     No.

13         Q.     Is the defense of your dissertation  
14         scheduled?

15         A.     Nope. We're hoping to get everything  
16         going and completed with drafts at least in a week.

17         Q.     So you hope to finish your dissertation  
18         in a week?

19         A.     The remaining paper, yes.

20         Q.     And schedule your defense when?

21         A.     Probably towards the end of April.

22         Q.     Okay. So you still expect to receive  
23         your Ph.D. in May?

24         A.     It's my hope. My application is just  
25         -- my application to graduate has been approved, so

1 that is my hope and expectation. If it has to go  
2 into the summer, it has to go into the summer. But  
3 that is my expectation right now. Things have come  
4 together faster.

5 Q. We'll get there.

6 Have you completed your dissertation?

7 A. No.

8 Q. In your expert report, you say, quote,  
9 "My dissertation focuses on applications of spatial  
10 statistics to political questions, including an  
11 article on redistricting simulations and the effect  
12 of communities of interest on partisan bias."

13 Did I get that right?

14 A. Yes.

15 Q. So I want to unpack that language a  
16 bit. First you say, "my dissertation;" is that  
17 right?

18 A. Yes.

19 Q. You didn't use the words draft  
20 dissertation; is that right?

21 A. Yes.

22 Q. You didn't say working dissertation; is  
23 that right?

24 A. Yes.

25 Q. You didn't say how many articles of

1 your dissertation were done or not done, correct?

2 A. Correct.

3 Q. You didn't say that it wasn't complete,  
4 did you?

5 A. (Inaudible).

6 Q. I'm sorry, that didn't come over the  
7 audio.

8 You didn't say that it wasn't complete,  
9 did you?

10 A. I did not say that.

11 Q. Do you have someone at Ohio State who  
12 is overseeing your work on your dissertation?

13 A. Yes.

14 Q. Who is that person?

15 A. Greg Caldeira.

16 Q. Do you send Mr. Caldeira drafts of your  
17 dissertation?

18 A. We have over time. The first paper has  
19 gone through some different iterations for  
20 different uses. So yeah.

21 Q. Okay. And when you e-mail with  
22 Mr. Caldeira, do you say, I have a dissertation, or  
23 do you say you have drafts?

24 A. I don't know.

25 Q. If we talked to Mr. Caldeira, would he



1 say you have a dissertation or you a draft  
2 dissertation?

3 A. He would probably say -- I don't know  
4 what he would say. Usually when we talk about --  
5 as grad students when we talk about and say, "What  
6 is your dissertation about?" And we say, "Well, my  
7 dissertation is about X, Y or Z." Not my draft  
8 dissertation or my working dissertation. We just  
9 refer to it as the dissertation.

10 Q. So you say -- your dissertation, in  
11 your report, you say, it contains, quote, "An  
12 article on redistricting simulations and the effect  
13 of communities of interest on partisan bias?"

14 A. That's not right.

15 Q. That's not right?

16 A. I didn't say it contained it.

17 Q. Okay. Let's unpack the wording then.  
18 You said, "My dissertation focuses;" is that right?

19 A. Uh-huh. That's right.

20 Q. Focus is in the present tense?

21 A. Yes.

22 Q. All right. And then you say, "On  
23 applications of spatial statistics and political  
24 questions, including."

25 Is including a present tense gerund?

1 A. I have no idea.

2 Q. Do you think in the way you used the  
3 word including, that that means that it currently  
4 includes something?

5 A. The focus does, yes.

6 Q. But not the dissertation?

7 A. The dissertation focuses -- I mean, I  
8 don't know how to diagram the sentence. And I have  
9 to be honest, I didn't spend a whole lot of time  
10 crafting the sentence. If I had to unpack that, I  
11 would say my dissertation, which, again, is just  
12 kind of how people refer to it. Not the  
13 dissertation project, which may have been more  
14 precise focuses. So what is the focus of your  
15 dissertation? Well, these are the three papers in  
16 it.

17 Q. Okay. But focuses is a verb, right?

18 A. If you say so.

19 Q. You can't say whether focuses is a  
20 verb?

21 A. I suppose it is. It's been a long time  
22 since I -- you just used the term gerund, and I  
23 don't have any recollection of what that means, so  
24 I'm assuming focus if the verb.

25 Q. Okay. And all I'm asking is when you

1 say something is including an article, do you mean  
2 -- would you understand that to mean that the  
3 article exists?

4 A. No.

5 Q. No.

6 A. No. If someone said, what is your  
7 dissertation about, and they said, my dissertation  
8 focuses on these three things. I wouldn't  
9 necessarily conclude or even assume that everything  
10 is done. I would assume that that's what their  
11 project focuses on. That is their area of inquiry  
12 and intent.

13 Q. Okay. You do have other pieces of your  
14 dissertation, right?

15 A. Right.

16 Q. You didn't list those in that sentence,  
17 correct?

18 A. Right.

19 Q. Okay. Now I want to state for the  
20 record that we just received the documents I'm  
21 about to show you over the last 12 hours. So we  
22 have not had time to review them thoroughly, but  
23 I'm going to pull them up.

24 A. Okay.

25 (EXHIBIT 16, Trende Dissertation 2, was

1 marked for identification.)

2 BY MR. TRIVEDI:

3 Q. Can you see this document?

4 A. Yes.

5 Q. Do you recognize it?

6 A. Yes.

7 Q. What is it?

8 A. It's the second dissertation paper.

9 Q. Okay. So can you tell us what this is  
10 about?

11 A. This is about use of integrated nested  
12 Laplace approximations to improve Bayesian modeling  
13 and to enable use of spatial and spatial temporal  
14 models in political science.

15 Q. Okay. Does this document have anything  
16 to do with racial gerrymandering?

17 A. No.

18 Q. Does it have anything to do with  
19 intentional discrimination and redistricting?

20 A. I guess you could use INLA if you  
21 wanted to somehow bring in spatial model of it, but  
22 that's not by intention and it is not the -- not  
23 something I really considered.

24 Q. So it's not part of this dissertation?

25 A. Racial gerrymandering?

1 Q. Yes.

2 A. Right. Racial gerrymandering is not  
3 part of dissertation.

4 Q. Nor is intentional discrimination?

5 A. Yeah, that's right. Intentional  
6 discrimination is not part of dissertation.

7 Q. Okay. I want to scroll down to page --  
8 this is 11. What does it say there at the top?

9 A. "Application 1 Voting."

10 Q. What does it say right underneath  
11 there?

12 A. "Needs to be redone for weighting."

13 Q. What does that mean?

14 A. That means that the -- so this section  
15 has to do with recreation of -- there is 24 -- 24  
16 GHAPS article from Irvin, and -- or three other  
17 authors on early voting, and same-day registration,  
18 and they use weighted lease squares. So I had  
19 started some work on this and realized that my code  
20 and INLA had not used weighted lease squares. So  
21 it's junk, so it has to be redone.

22 Q. Okay. But when you say, "voting," you  
23 again don't mean redistricting?

24 A. No, no.

25 Q. And you don't mean racial

1       gerrymandering?

2               A.     No, no. I think we would agree to  
3 stipulate on it. Our side at least would agree to  
4 stipulate on this. It doesn't have anything to do,  
5 in my intent, at least with gerrymandering.

6               Q.     But it also doesn't have to do with the  
7 sort of simulation that Dr. Imai ran in his expert  
8 report in this case, right?

9               A.     Agreed.

10              Q.     Or the methods that you employed in  
11 your expert report, correct?

12              A.     That's right. I didn't use INLA in my  
13 expert.

14              Q.     And you don't use -- I'm sorry. You  
15 done use the gerrymandering index in this  
16 dissertation draft?

17              A.     No.

18              Q.     And just to clarify one more time,  
19 Application 2 says, "Ballot Order," correct?

20              A.     Correct.

21              Q.     That doesn't have anything to do with  
22 redistricting either?

23              A.     That's correct.

24              Q.     Okay. I'm pulling up another document.  
25 Again, I'm saying for the record that we received

1 this document at about 7:40 a.m. this morning, and  
2 we have not had a chance to review this nearly at  
3 all. But I want to ask you some questions about it  
4 because I have you here.

5 Do you see this document?

6 A. Yes.

7 (EXHIBIT 17, Trende Dissertation 1, was  
8 marked for identification.)

9 (EXHIBIT 18, Ohio Organizing  
10 Collaborative v. Husted, 2, was marked for  
11 identification.)

12 MR. TRIVEDI: And for the record, we  
13 have marked this Trende Exhibit 17. I apologize,  
14 Konstantine. I can send you the exhibit numbers of  
15 everything that we have discussed to this point, as  
16 well, since we're just doing it over screen share,  
17 but, sorry.

18 BY MR. TRIVEDI:

19 Q. Mr. Trende, so what is this document?

20 A. This is the first paper.

21 Q. The first paper of your dissertation?

22 A. I can call it my dissertation, and not  
23 a draft dissertation, yes.

24 Q. Let's call it your draft dissertation.  
25 This paper is not about redistricting either, is

1 it?

2 A. No.

3 Q. It's not about regional gerrymandering,  
4 is it?

5 A. It is not.

6 Q. It's not about intentional  
7 discrimination, correct?

8 A. That's right.

9 Q. And it's not about -- it doesn't employ  
10 the models used by Dr. Imai in his report, correct?

11 A. That's right.

12 Q. It doesn't used the models employed by  
13 Dr. Ragusa in his report, correct?

14 A. That -- that is right. It is  
15 irrelevant to this case.

16 Q. So I want to go back to -- well, let me  
17 finish with these two documents. I just showed you  
18 PDFs, correct?

19 A. Correct.

20 Q. Do you work in PDF?

21 A. No.

22 Q. What application do you work in?

23 A. For now, Word, and then it will switch  
24 over to whether you call it LaTeX or LaTeX or --  
25 I'm going to call it LaTeX because that's what I



1 call it for the final version.

2 Q. Sorry about that. Say that last part  
3 again? I cut you off.

4 A. The final version will switch over to  
5 LaTeX, but it is not in LaTeX formatting.

6 Q. You don't have a version of this that  
7 is in LaTeX currently?

8 A. That is correct.

9 Q. Do you have a version of it that is in  
10 Word?

11 A. Yes.

12 Q. Do you have a version of paper one that  
13 is in Word?

14 A. Yes.

15 Q. And a version of paper two that is in  
16 Word?

17 A. Yes.

18 Q. Why didn't you send those versions to  
19 your counsel?

20 A. Because I usually would send a  
21 finalized version for purposes of something in PDF,  
22 and frankly, I don't want your experts being able  
23 to mark it up and make comments on it.

24 Q. But this isn't finalized, is it?

25 A. For our purposes, it is.

1 Q. But -- okay. Are you saying that the  
2 documents that we just looked at are final?

3 A. For purposes of this deposition, it's  
4 the final format they're going to be in, yes.

5 Q. So you're refusing to send us a Word  
6 version?

7 A. I can't think of any rule that requires  
8 you to send it in a particular format, or any  
9 reason why you would need it in Word, so, yes.

10 Q. When was the last --

11 A. I could be -- I could be -- I could be  
12 persuaded on that, but...

13 Q. When was the last time you worked on  
14 either of these articles?

15 A. Last night.

16 Q. Which article did you work on last  
17 night?

18 A. Both of them.

19 Q. Okay. What did you do?

20 A. I cleaned up some of language and made  
21 some edits. Because if it's going to go out the  
22 door to someone like Dr. Imai, I want it to look as  
23 good as it can.

24 Q. Are you aware that we asked for these  
25 documents before last night?

1 A. Yes.

2 Q. Did you have access to them before last  
3 night?

4 A. No.

5 Q. No?

6 A. No.

7 Q. But you had access to them last night,  
8 such that you were working on them?

9 A. Yes.

10 Q. And you knew that there was a request  
11 out to send them to us?

12 A. Yes.

13 Q. And you worked on them more instead?

14 A. Yes. I got home from my overseas trip,  
15 cleaned up some of the language on them, and sent  
16 them out. And they are now the latest version of  
17 my dissertation, which was what the request was.

18 Q. Okay. Did you work on them at another  
19 time in the last week?

20 A. I may have drafted an insert that  
21 didn't go in, but no...

22 Q. What do you mean may have, did you?

23 A. I'm trying to remember. It didn't go  
24 in, so, no.

25 Q. So when did you draft that piece that

1 didn't go in?

2 A. I had a separate document, a one pager  
3 that I was messing with on my laptop in Iceland.  
4 Yeah.

5 Q. So you had access to Word in Iceland,  
6 correct?

7 A. Oh, yeah.

8 Q. Did you have access to your draft  
9 dissertation papers in Iceland?

10 A. No.

11 Q. How was that?

12 A. Because I have a desktop, and because  
13 constructive Monte Carlo simulations require a lot  
14 of power. That's where things are pretty much  
15 housed.

16 Q. When did you go to Iceland?

17 A. I went -- so that question is not as  
18 straightforward as one may assume. Friday I had to  
19 teach and then deliver my kids to my parents.  
20 Saturday we traveled to Lexington, and Sunday after  
21 dropping my oldest off at his school for special  
22 needs, we left for Iceland.

23 Q. Okay. During that weekend, did you  
24 work on your dissertation at all?

25 A. No.

1 Q. No. Last night though, you worked on  
2 it, correct?

3 A. Because I was back in my house, yes.

4 Q. Were you in your house that weekend  
5 that you just described?

6 A. No. As I said, I was traveling to  
7 Iceland, and then we dropped my kid off at the  
8 school for special needs. I was travelling  
9 Lexington, Kentucky, where my wife's in-laws go,  
10 and where my son's school for special needs --  
11 well, I guess it's in Frankfurt, but close enough.  
12 Then we were traveling to Iceland.

13 Q. Okay. I want to go back to the paper  
14 that says the article -- or I'm sorry, "The  
15 application on voting needs to be redone for  
16 waiting?"

17 A. Uh-huh.

18 Q. I think you said earlier that you  
19 expect to be done with your dissertation in the  
20 next week, right?

21 A. I have drafted to everyone yes of all  
22 three.

23 Q. Do you expect that -- do you expect  
24 that piece on waiting to be redone in the next  
25 week?

1 A. Yes.

2 Q. And you said --

3 A. It's a matter -- it's a matter of  
4 inserting a waiting term into the INLA and  
5 rerunning it.

6 Q. Okay. You haven't done that at this  
7 point?

8 A. No, I have not.

9 Q. And you haven't turned over the article  
10 that you say will cover redistricting simulations  
11 and effect of communities of interest on partisan  
12 bias, correct?

13 A. There is nothing to turn over.

14 Q. There is no draft at all?

15 A. No.

16 Q. Nothing in Word?

17 A. Nothing in Word.

18 Q. And you expect that to get done in the  
19 next week as well?

20 A. Yes.

21 Q. How many pages is that going to be?

22 A. Probably 20 to 30.

23 Q. Okay. And you're going to run  
24 mathematical computations for that as well?

25 A. Yes.

1 Q. All right.

2 A. We're lawyers, we have all written 25  
3 page briefs in a day or two. It is a skill that's  
4 fun to develop.

5 Q. How long have you been enrolled in your  
6 Ph.D. program at OSU?

7 A. Since 2016.

8 Q. During this time, you have never  
9 established an academic peer review journal  
10 article, correct?

11 A. Correct.

12 Q. So you certainly haven't established an  
13 academic peer journal article regarding  
14 redistricting, correct?

15 A. Correct.

16 Q. Or voting rights?

17 A. Correct.

18 Q. Have you ever presented at any academic  
19 conference regarding redistricting?

20 A. No.

21 Q. Or voting rights?

22 A. No.

23 Q. You write for a website called  
24 RealClearPolitics, correct?

25 A. Correct.

1 Q. Would you say that's what you spend  
2 most of your time on?

3 A. Certainly over the past decade, yes. I  
4 mean, right now it's busy with redistricting work.  
5 But, generally speaking, yes.

6 Q. And RealClearPolitics is like a blog;  
7 is that right?

8 A. No.

9 Q. Is it published online?

10 A. It is.

11 Q. Does it appear in print?

12 A. It does not.

13 Q. And the articles that you write for it,  
14 they're not peer reviewed, correct?

15 A. That's correct.

16 Q. Do any of your articles involve  
17 quantitative analysis that you did yourself?

18 A. Yes.

19 Q. What sort of quantitative analysis?

20 A. I mean, I typically -- not typically.  
21 I frequently will use regression analysis. I would  
22 have to go through the articles to see what else  
23 has been used, but that is the main tool that I  
24 used for them.

25 Q. Have you used REDIST for your articles



1 in RealClearPolitics?

2 A. No.

3 Q. Have you used the gerrymandering index  
4 for those articles?

5 A. No.

6 Q. Have you use any methodology that  
7 Dr. Imai used in his expert report?

8 A. No.

9 Q. Have you used any of the methodologies  
10 that Dr. Ragusa used?

11 A. I think he uses logistics. Well, no.  
12 I'm not sure he uses varying on logistics, so no.

13 Q. You teach some classes as well, right?

14 A. That's right.

15 Q. Any on simulations analysis?

16 A. That's not what the class is on, no.

17 Q. Any of any of the methodologies that  
18 Dr. Imai used in his report?

19 A. Not for the class. I wouldn't say  
20 they're classes on sequential Monte Carlo or  
21 anything like that so no.

22 Q. Any of the -- did -- in the classes  
23 that you teach, do you teach any of simulations or  
24 analyses that Dr. Ragusa uses?

25 A. Well, that -- okay. So that's a

1 slightly different question than --than your last  
2 one, but no, I don't.

3 Q. You mentioned a program called REDIST,  
4 that's R-E-D-I-S-T in your report, right?

5 A. That's right.

6 Q. Can you tell us what REDIST is?

7 A. It's a package to run redistricting  
8 simulations that was developed by Dr. Imai and his  
9 team for use in R.

10 Q. When you say, "for use in R" what do  
11 you mean?

12 A. So R -- I mean, I would say -- I don't  
13 -- I don't know if I would refer to REDIST as the  
14 program. R is the program platform that runs the  
15 REDIST package.

16 Q. When you say, "R is the program," what  
17 does that mean?

18 A. So R is a computing language, and it's  
19 a -- I don't know if the precise word is platform  
20 or whatever that enables this computing language.  
21 And I consider that to be a program. It's commonly  
22 used in statistics and data analysis.

23 Q. And you said Dr. Imai helped develop  
24 that program; is that right?

25 A. I don't think he helped develop R, but

1 he helped -- I think he was primarily responsible  
2 for REDIST package.

3 Q. All right. When did you learn how to  
4 use REDIST?

5 A. Last year.

6 Q. About when?

7 A. I mean the second half.

8 Q. Okay. Do you use REDIST in your draft  
9 dissertation?

10 A. No.

11 Q. Do you use it for any of your Ph.D.  
12 work?

13 A. No. Well, no.

14 Q. Do you use it in your articles for  
15 RealClearPolitics?

16 A. No.

17 Q. Have you us used it in other expert  
18 reports that you have done?

19 A. Yes, yes.

20 Q. Which one?

21 A. There is an expert report in Kentucky,  
22 an expert report in Maryland, and an expert report  
23 in New York. An expert report where I haven't -- I  
24 will say, I'll just say this one. I haven't been  
25 disclosed, and I'm not going to discuss that one

1 obviously. Off the top of my head that is all I  
2 can think of.

3 Q. In those expert reports where you use  
4 REDIST, are any of them racial gerrymandering  
5 cases?

6 A. So can we just -- the one where I  
7 haven't been disclosed, can we just put that to the  
8 side, and say that I have mentioned it and not  
9 talked about it further, and my answers will be  
10 assumed to not include that case?

11 Q. Yes.

12 A. Okay. Then it's not the -- then no.  
13 Then -- none of those cases which I have been  
14 disclosed are racial gerrymandering case.

15 Q. Would you say you learned REDIST for  
16 your expert report work?

17 A. I think I learned about it in one of  
18 the department colloquia. Someone who is doing  
19 redistricting simulations on school boards. So  
20 that would have been where I was exposed to it, and  
21 kind of got the idea of how it worked. I don't  
22 think it -- well, I'm positive it didn't have SMC  
23 in it yet. But that's where I have done the most  
24 of the work with it, yeah.

25 Q. In your expert report work?

1 A. Yes.

2 Q. Okay. And did anyone teach you how to  
3 use REDIST?

4 A. No.

5 Q. You learned it on your own?

6 A. I think I might have asked Mike Barber  
7 some questions about it, but not for this case.  
8 But for the most part I learned it on my own. I  
9 mean, that's -- that's kind of basic Ph.D. methods  
10 coursework is -- or, you know, problem set  
11 coursework is, you know, here is a package, go  
12 figure out how to use it, and answer some questions  
13 about it. So, thankfully, Dr. Imai and his team  
14 put very useful demonstrations of it online.

15 Q. You don't use it for your dissertation,  
16 right?

17 A. It will have a mention in kind of  
18 literature review obviously for the redistricting  
19 paper. But no, I won't be employing SMC for it as  
20 a constructive Monte Carlo program.

21 Q. Right. I think it is SMC. What --  
22 what version of REDIST was used by Dr. Imai in his  
23 expert report?

24 A. He has a special version that has to be  
25 downloaded from -- you get instructions on how to

1 download it from the -- from -- I think it's the  
2 GitHub.

3 Q. Did you download it?

4 A. Yes.

5 Q. Do you know what it's called?

6 A. I don't.

7 Q. Would it surprise you to learn that  
8 it's called Markov Chain Monte Carlo or MCMC?

9 A. Package?

10 Q. Uh-huh.

11 A. No, I didn't know that. I'm shocked.  
12 Know one has used MCMC as a package name before  
13 this.

14 Q. So it's -- what would you say is the  
15 thing that you downloaded from GitHub?

16 A. In his documentation, there is a Read  
17 Me file that tells you how to download the version  
18 of his package the he used for this case.

19 Q. And so that's what you did?

20 A. I followed those instructions, yes.

21 Q. You never used the thing that was  
22 downloaded before?

23 A. Oh. I mean, no. I'm assuming he is  
24 giving truthful instructions on how to download it.  
25 It seemed to replicate his findings from the codes.

1 So yeah.

2 Q. I'm sorry. I -- yeah. My -- my  
3 question was unclear. What I mean is, the  
4 resulting package that came from that download, was  
5 that the first time you had used that package?

6 A. Yeah, that's why I don't do -- I don't  
7 really change up the assumptions of his code that  
8 much or -- or anything of the sort. I wouldn't  
9 feel comfortable doing that. I just wanted to  
10 produce his maps.

11 Q. Right. Are you familiar with Strata?

12 A. Strata?

13 Q. Uh-huh.

14 A. No. Is that -- I mean, well -- I -- I  
15 have heard the word Strata before, but I'm assuming  
16 you're using it in a particular context. So I  
17 don't know the particular context you're using it  
18 for.

19 Q. I'm sorry. I -- I -- I misread  
20 toggling between documents. Give me one second.

21 A. If he means Stata or Stata, the answer  
22 is yes.

23 Q. Yeah. I just want to make sure I get  
24 it right now, too. Yep. Yeah. You mentioned a  
25 program or package called Stata. Can you tell us

1       what that is?

2               A.     It's another -- it's another  
3       programming language or programming package. I  
4       don't know -- I don't know if I would call it a  
5       language. It's been around for a long time. I  
6       used it back in my master's program for the first  
7       time.

8               Q.     How often do you use Stata in your  
9       work?

10              A.     I don't prefer it. I mean, a lot of --  
11       some of -- a good good chunk of my statistics  
12       coursework used it and learned how to use it there,  
13       but I prefer R.

14              Q.     Okay. When was the last time you used  
15       Stata?

16              A.     Not for this report.

17              Q.     How so?

18              A.     It's -- Dr. Ragusa's code is written in  
19       Stata or State.

20                    THE WITNESS: It's S-T-A-T-A for the  
21       court reporter.

22                    Actually, I think -- there may have  
23       been another expert court since then that was  
24       written in Stata that I executed. It had code in  
25       Stata.



1 Q. Do you know that for sure?

2 A. I'm almost positive that I have used it  
3 for something else, some replication since then.

4 Oh, the -- the -- what do you call it?  
5 It's for my dissertation. The burden paper did  
6 their work in Stata so to make sure I was  
7 replicated correctly in R, I had to run it in  
8 Stata.

9 Q. Was that the last time you used Stata?

10 A. Yeah.

11 Q. What was the last time before that?

12 A. For this paper or for this expert  
13 report.

14 Q. And the last time before that?

15 A. I couldn't say. The last time -- the  
16 last time I can say with certainty would have been  
17 probably for my longitudinal data analysis class  
18 that was in the School of Public Health. And it  
19 was big over there. I have no idea if I have used  
20 it in the interim. I'm sure I have because there  
21 is still people who program in it.

22 Q. But you can't remember when exactly?

23 A. No, I couldn't give particular  
24 particulars on it.

25 Q. All right. You testified and/or filed

1 expert reports in many voting rights cases; is that  
2 right?

3 A. Yes.

4 Q. How many would you say?

5 A. Maybe 15.

6 Q. But you have only once ever been an  
7 expert for the plaintiff's side; is that right?

8 A. That's right.

9 Q. What case was that?

10 A. That was -- well, actually, no. That's  
11 not true. Twice.

12 Q. What are both of those cases?

13 A. The challenges to the New York  
14 redistricting plan and the challenge to the  
15 Maryland redistricting plan.

16 Q. Were the plaintiffs in either of those  
17 cases racial minorities?

18 A. I didn't meet them, so I have no clue.

19 Q. Were they making racial gerrymandering  
20 claims?

21 A. They were not.

22 Q. Were they claiming that the state had  
23 discriminated against them based on race?

24 A. They did not.

25 (EXHIBIT 10, Trende New York Report,

1 was marked for identification.)

2 (EXHIBIT 11, Common Cause v. Rucho, was  
3 marked for identification.)

4 (EXHIBIT 12, New York Redist Opinion,  
5 was marked for identification.)

6 BY MR. TRIVEDI:

7 Q. I want to turn to the New York case.  
8 That's the redistricting case this year, correct?

9 A. Correct.

10 Q. You didn't list your work in that case,  
11 in your expert report in this case, did you?

12 A. Um, I will take your assertion as true.

13 Q. Do you want to check your expert report  
14 in this case real quick?

15 A. I was going to do a search for it, but  
16 I can't remember how to pronounce or spell the name.  
17 I don't see it in there, no.

18 Q. Okay. Do you know when you submitted  
19 your expert report in the New York case?

20 A. I don't.

21 Q. I'm going to pull it up for you. Give  
22 me one second. Can you see that, Mr. Trende?

23 A. (No verbal response).

24 Q. I'm sorry. Has it come up for you yet?

25 A. Yes.

1 Q. I'm scrolling down. Can you read  
2 what's there in the middle?

3 A. Expert Report of Sean P. Trende,  
4 February 14th. And then the embarrassing typo on  
5 the front page of 2021.

6 Q. The date is actually 2022; is that  
7 right?

8 A. That's correct.

9 Q. Now, scrolling up to the caption, do  
10 you recognize that as the caption in the New York  
11 case?

12 A. Yes.

13 Q. Okay. And -- so would you agree that  
14 you submitted this report in the New York case on  
15 February 14th, 2022?

16 A. Yes.

17 Q. And do you remember what date you  
18 submitted your expert report in this case?

19 A. It says February 10th at the bottom of  
20 what I have up.

21 Q. Okay. And you didn't list the New York  
22 case in your South Carolina -- in the export report  
23 in this case, did you?

24 A. No.

25 Q. Were you working on the New York export

1 report on February 10th?

2 A. Yes.

3 Q. And in the New York case, or in the New  
4 York export report, you don't list your South  
5 Carolina expert report either, do you?

6 A. I, again, will take your word for it.

7 Q. Okay. And you had certainly submitted  
8 your expert report in this case by the time you  
9 submitted your export report in New York, correct?

10 A. That's right.

11 Q. And you didn't list it?

12 A. No. It does -- again, I'll take your  
13 stipulation. I probably forgot to update it in the  
14 craziness of filing.

15 Q. Okay. I'm going to take this --

16 A. I mean, they're four days apart so...

17 Q. So you were working on them at the same  
18 time?

19 A. Yes. I wouldn't have listed it here  
20 because I don't think I have been disclosed yet,  
21 and I probably just forgot the New York.

22 Q. What do you mean you wouldn't have  
23 listed it here because you wouldn't have been  
24 disclosed yet?

25 A. I don't list work where I haven't been

1 disclosed as an expert.

2 Q. You don't think you were disclosed as  
3 an expert in New York four days before you  
4 submitted your expert report?

5 A. I don't think I was. Maybe they did  
6 expert witness disclosures, and I wasn't aware of  
7 it. But I don't think we know -- we certainly  
8 didn't know who their experts were going to be  
9 until we received their report in that case.

10 In that cases -- cases -- cases that  
11 cycle are a little bit of a fire drill because we  
12 got to census data so late, so it's -- it's been  
13 kind of a nightmare.

14 Q. Uh-huh. Are there any other case that  
15 you didn't list in your expert report in this case?

16 A. Well, let's see. So that Maryland case  
17 that we talked about.

18 Q. Were you working on an expert report in  
19 the Maryland case when you submitted your expert  
20 report in this case?

21 A. Yeah. Yeah. It may have been in two  
22 expert reports. I don't remember when we got  
23 started on the state senate stuff.

24 Q. And you didn't list it in your expert  
25 report in this case?

1           A.    No, I wouldn't disclose myself as an  
2   expert.  I don't think I have ever done that.

3           Q.    What is the case name in Maryland?

4           A.    It's Szelgia I think, S-Z-E-L-G-I-A.

5           Q.    Are you disclosed now?

6           A.    Yes.

7           Q.    But you didn't send us your reports or  
8   update your report to note that at any point, did  
9   you?

10          A.    No.

11          Q.    Okay.  Will you send us that  
12   information now?

13          A.    Oh, sure.  I'm happy to send you the  
14   expert reports.

15          Q.    Okay.  Are there any other cases that  
16   you decided that you wouldn't disclose yourself as  
17   an expert?

18          A.    Now -- and see, this is a genuine  
19   oversight.  The North Carolina political  
20   gerrymandering cases are not on here.  I did two  
21   short expert reports that don't involve simulations  
22   in those cases.

23          Q.    And is that because of the fact that  
24   you weren't disclosed or you just didn't list them?

25          A.    That -- that was a mistake.

1 Q. Okay.

2 A. Yeah.

3 Q. And I think you mentioned the case in  
4 Kentucky as well. I don't see that in your expert  
5 report in this case?

6 A. I hadn't even been hired by the time  
7 I -- I don't think I got hired in that until pretty  
8 recently.

9 Q. Okay. You're hired now?

10 A. Yes. Dr. Imai should have my report.

11 Q. Well, have you turned it over to the  
12 Plaintiffs?

13 A. No.

14 Q. Will you do that now?

15 A. Happily. I mean, you can get it from  
16 Dr. Imai a lot quicker, but, yes.

17 Q. Dr. Imai doesn't have the same  
18 obligations that you do.

19 What is that Kentucky case name?

20 A. I don't know.

21 Q. Can you look that up for us --

22 A. It's in Kentucky -- it's in Kentucky  
23 State Court.

24 Q. Okay. Any other cases that you did not  
25 put on your expert report in this case that you are



1 working on?

2 A. Well, like I said, and we kind of  
3 agreed earlier that with one of the cases, because  
4 I haven't been disclosed as a witness yet, it is  
5 okay not to talk about it, and I'm not going to  
6 talk about it. I'll -- at the break, I will e-mail  
7 to counsel my reports in New York, Maryland, and  
8 Kentucky, and I will also check to see if there are  
9 any other reports that I can't think of right now  
10 that I have sent along.

11 Q. In North Carolina?

12 A. If I even have those, but sure.

13 Q. Do you have drafts?

14 A. I'm sure I do, but that would be  
15 protected information. So I'll see if I have  
16 finalized signed and send them to you since they're  
17 in federal court.

18 Q. You're aware that we have a Protective  
19 Order in this case, right?

20 A. Yeah. I guess. Actually, no, I don't  
21 know that.

22 (EXHIBIT 3, NAACP vs. McCrory, was  
23 marked for identification.)

24 BY MR. TRIVEDI:

25 Q. Okay. I want to talk about some of

1 cases that you did list in your CV. First is NAACP  
2 v. McCrory.

3 Do you remember that case?

4 A. Yes.

5 Q. So I want to pull up quickly page five  
6 of your report. Can you see that, Mr. Trende?

7 A. Yes.

8 Q. Can you read Paragraph 14?

9 A. "I authored two expert reports NAACP v.  
10 McCrory #13CV658 Federal District of North  
11 Carolina, which involved challenges to multiple  
12 changes to North Carolina's voter laws, including  
13 the elimination of a law allowing for counting of  
14 ballots casted in the wrong precinct. I was  
15 admitted as an expert witness and testified at  
16 trial. My testimony discussed the "effect" prong  
17 of the Voting Rights Act claim. I did not examine  
18 the issues relating to intent.

19 Q. Okay. Are you aware that there was an  
20 opinion in this case?

21 A. Yes.

22 Q. Have you read that opinion?

23 A. It's about 600 pages long, and it's  
24 been a while, but yes.

25 Q. Did you read the whole thing at the

1 time it came out?

2 A. Probably not.

3 Q. Are you aware that it discusses your  
4 testimony and your expert opinion?

5 A. The District Court opinion, yeah.

6 Q. Okay. I'm going to pull that up now.  
7 Can you see that, Mr. Trende?

8 A. Yes.

9 Q. And I know that caption is long, but do  
10 you understand this to be the opinion in the case  
11 North Carolina State Conference NAACP v. McCrory?

12 A. Yes.

13 Q. Okay. You're right that it's a long  
14 opinion. I'm going to go to page 63.

15 A. And just to clarify, I listed this  
16 opinion which is about 600. I see it's 200 here.

17 Q. That's fine. Thanks.

18 Do you see Note 71 here?

19 A. Yes.

20 Q. Do you see that it references your  
21 name?

22 A. Yes.

23 Q. And do you see at the bottom, I may  
24 even be able to highlight it for you. Can you read  
25 that part that I just highlighted?

1           A.     "In any case, this court concludes  
2     Mr. Trende is qualified to present and organize the  
3     laws of the fifty states."

4           Q.     That was the extent of the expert  
5     opinion that the court allowed in this case, right?

6           A.     As long as we agree that it didn't rule  
7     on any other part. I don't know if it ever cited  
8     to any other part, but I'll take your stipulation  
9     that it didn't.

10          Q.     Did the court accept an opinion about  
11     the VRA?

12          A.     That's a -- that had to do with the  
13     totality of the circumstances test, so that was  
14     part of VRA claim.

15          Q.     But when the court says, "Mr. Trende is  
16     qualified to present and organize the laws of the  
17     fifty states," was the VRA included in that part?

18          A.     So the case involved a challenge to a  
19     variety of laws, and, at least to my understanding,  
20     part of how Defendants wanted to make their  
21     totality of the circumstances argument for the  
22     Voting Rights Act was by arguing that their laws --  
23     that the -- that the state of laws in North  
24     Carolina that brought about wasn't anything  
25     particularly unusual. And so they had to do a --

1 for part of the analysis, they had to do a  
2 fifty-state survey of -- of, you know, how many  
3 days early voting states offer, whether it's  
4 same-day registration was allowed. So this was  
5 used for the Voting Rights Act claim.

6 Q. Did the Court say you were qualified to  
7 present and organize -- to prevent on the Voting  
8 Rights Act?

9 A. No. It does not say that, but this  
10 opinion was offered as part of a Voting Rights Act  
11 claim.

12 Q. But you didn't say in your expert  
13 report, in this case, that the court only qualified  
14 you as to the laws of the fifty states and not the  
15 Voting Rights Act, correct?

16 A. No, I don't think I was offered as a  
17 Voting Rights Act expert in that case.

18 Q. Great.

19 A. As a matter of fact, it says what I was  
20 offered at the top of footnotes 51 or 71, sorry.

21 Q. And going back to your expert report,  
22 you say, "My testimony discussed the affect from  
23 the Voting Rights Act on this claim."

24 You did not include in your expert  
25 report the fact that you were not qualified as an

1 expert other than when you write that claim; is  
2 that right?

3 A. I wasn't offered as an expert on the  
4 Voting Rights Act. I was offered as an elections  
5 expert. I mean, the exact verbiage is on that we  
6 just saw, and so that testimony went to the Voting  
7 Rights Act claim. I don't think I'm being offered  
8 as an expert on Shaw claims in this case, but if I  
9 were to summarize my opinion, I would certainly say  
10 it has to do with Shaw claim.

11 Q. I'm now with going to page 85 of that  
12 opinion.

13 Do you see a Footnote 112?

14 A. Yes.

15 Q. Can you read Footnote 112, up to the  
16 citation that starts C? You don't have to read the  
17 citation.

18 A. "At trial Mr. Trende testified that  
19 Utah does not permit out-of-precinct voting.  
20 However, it appears that Utah will have ballots  
21 casts in the wrong precincts so long as they're  
22 casted in the correct county."

23 Q. So is it fair to say that you made a  
24 mistake about whether Utah permits out-of-precinct  
25 voting?

1           A.     That certainly seems to be what the  
2     Court found, yes.

3           Q.     Did you put that in your expert report  
4     in this case?

5           A.     No.

6                     (EXHIBIT 4, Ohio Organizing  
7     Collaborative v. Husted, was marked for  
8     identification.)

9     BY MR. TRIVEDI

10          Q.     Okay. I want to talk about another  
11     case where you were an expert at Ohio Democratic  
12     Party versus Husted. So give me just a second to  
13     pull it up.

14                    So you admit in your expert report in  
15     this case that the judge in the Husted case, quote,  
16     "Refused to consider one of your opinions,"  
17     correct?

18          A.     Correct.

19          Q.     And you characterized it in your expert  
20     report as the judge, quote, "Believed you should  
21     have done more work to check the data behind the --  
22     behind the -- that the data behind the application  
23     was accurate," correct?

24          A.     That is my recollection, yes.

25          Q.     Okay. Do you know that there was an

1 opinion in the Husted case of law?

2 A. Yes.

3 Q. You read it?

4 A. Probably eight years ago, but yeah.

5 Q. Okay. Did you read it at the time,  
6 eight years ago?

7 A. I would assume so, yes.

8 Q. Do you think you learned any lessons  
9 from it?

10 A. I would hope so. You like to think you  
11 learn from everything you do.

12 Q. You're not sure though?

13 A. No, I'm not sure.

14 Q. Okay. Do you see the paragraph where I  
15 have highlighted the first couple words?

16 A. "Even if the Court admitted the maps,  
17 the Court would," yes, I see that.

18 Q. Okay. Could you read the part that I  
19 highlighted?

20 A. Yeah. "Even if the Court admitted the  
21 maps or recorded them as well as Trende's opinion  
22 of what they visually demonstrate little weight.  
23 While Trende offers them to demonstrate the  
24 relatively convenient locations for early voting  
25 centers to non-white voters, they do not account



1 for the population density of the precincts or the  
2 myriads of other factors related to convenience and  
3 required no mechanism by which to determine the  
4 actual distance between the EIP voting center and  
5 the locations on the map."

6 Q. Okay. The Court here, accorded your  
7 opinion, about maps, quote, "little weight;" is  
8 that right?

9 A. That's right.

10 Q. Did you put this in your expert report  
11 in this case?

12 A. No.

13 Q. Sorry, give me one second. Okay. I'm  
14 sorry, it's hard to see with the way Zoom is set  
15 up, but can you see the part that I have  
16 highlighted now?

17 A. Yes.

18 Q. Can you read that for me, please?

19 A. "While Trende implied the data from  
20 Figure 44 was obtained during his work in NAACP v.  
21 V. McCrory, he does not identify the source of the  
22 data, let alone establish how he collected it or  
23 has testify to it's reliability. As accordingly,  
24 the Court will exclude Table 44."

25 Q. Did you include this in your expert

1 report in this case?

2 A. No.

3 Q. All right. There was a companion case  
4 called Ohio Organizing Collaborative v. Husted; is  
5 that right? You listed that in your report?

6 A. Yeah. I think it seems sequentially --  
7 I think this case -- one of the cases settled, and  
8 then a different group of plaintiffs kind of re-  
9 brought up the mantle, but I don't remember the  
10 order.

11 Q. Okay. Do you remember an opinion  
12 coming out in Ohio Organizing Collaborative?

13 A. I'm sure there was one.

14 Q. Okay. I'm going to show it to you.  
15 To you see the part I have highlighted?

16 A. Yes.

17 Q. Can you read that for me?

18 A. "As explained in greater detail in the  
19 Court's Order on Plaintiff's Motion to Exclude  
20 Trende as an expert, much of his report is  
21 irrelevant to the Court's analysis."

22 Q. You didn't include this part in your  
23 expert report in this case, did you?

24 A. No.

25 (EXHIBIT 5, WHITFORD v. GILL, was

1 marked for identification.)

2 BY MR. TRIVEDI:

3 Q. Okay. The next case I want to talk  
4 about is Whitford v. Nickel or Whitford v. Gill in  
5 Wisconsin.

6 Do you remember that case?

7 A. Yes.

8 Q. So in your expert report in this case,  
9 you said at Paragraph 19, "I authored expert  
10 reports in these cases, which were efficiency  
11 gap-based redistricting cases filled in Ohio,  
12 Wisconsin, and North Carolina;" is that right?

13 A. That's right.

14 Q. You don't say anything about how the  
15 Court treated your expert report or opinions; is  
16 that right?

17 A. No.

18 Q. Okay. Have you read the opinions in  
19 these cases?

20 A. I don't think I have in the Ohio case.  
21 Certainly in the North Carolina and Wisconsin  
22 cases.

23 Q. You did read the Wisconsin opinion?

24 A. Yeah.

25 Q. Can you tell us what the gist is of

1 your opinion in this case?

2 A. This case is guilty Whitford?

3 Q. Uh-huh.

4 A. The Whitford v. Nickel?

5 Q. Yes.

6 A. I believe in that case, the opinion was  
7 about clustering in Wisconsin. Political  
8 clustering.

9 Q. What about it?

10 A. So if partisans are clustered in the  
11 state. So the -- the efficiency gap, at least  
12 purports to measure packing and cracking of  
13 partisans. And so I think the argument the counsel  
14 wanted to make was that if democrats were packed in  
15 a few key districts, or in a few areas that it  
16 would naturally inflate their efficiency gap.

17 Q. Okay.

18 A. It would be unintentionally  
19 gerrymandering to borrow a phrase.

20 Q. And you submitted maps in this case,  
21 right?

22 A. Yes.

23 Q. Okay. Can you read the part that I  
24 have highlighted from the -- oh. Sorry about that.

25 Can you read the part I have

1 highlighted?

2 A. Yeah. "Moreover, the color coding on  
3 Mr. Trende's maps, although a useful demonstrative,  
4 reported to serve a substitute for quantitative  
5 data on the margin of victory in each county.  
6 Without this information we cannot know whether,  
7 for example, a county won by a Republican  
8 presidential candidate was deeply or narrowly  
9 Republican."

10 Q. Okay. Can you -- well, can you read  
11 this opinion, too?

12 A. "In our view this evidence is worthy of  
13 little if any weight.

14 Q. Okay. This is two cases in a row where  
15 the opinion give your evidence little weight; is  
16 that right?

17 A. I will assume that we're going  
18 chronologically, then yes.

19 Q. No. Just two there a row that I have  
20 showed you just now?

21 A. Yes.

22 Q. You didn't put the fact that the Court  
23 accorded your evidence around maps, little if any  
24 weight, in your expert report in this case, did  
25 you?

1 A. No.

2 (EXHIBIT 6, Fair Fight Action v.  
3 Raffensperger, were marked for identification.)

4 (EXHIBIT 7, League of Women Voters of  
5 Ohio v. Ohio Redistricting Commission, was marked  
6 for identification.)

7 BY MR. TRIVEDI:

8 Q. Okay. The next case is Fair Fight  
9 Action v. Raffensperger.

10 Do you remember this case?

11 A. Yes.

12 Q. In your expert report in this case, you  
13 admit that you were rejected in the Raffensperger  
14 case; is that right?

15 A. That's correct.

16 Q. Because you lacked sufficient  
17 credentials for the opinion that you were trying to  
18 give?

19 A. From my read of it, it was because the  
20 judge -- because the judge felt that I lacked  
21 sufficient expertise in elections administration.  
22 Which I -- I'll be honest, I'm not sure what that  
23 has to do with my opinion that I rendered there,  
24 but that's my understanding.

25 Q. Do you remember the judge having

1 anything to say about your qualifications to be an  
2 expert in that case?

3 A. I mean, he certainly took into  
4 consideration the fact that I didn't have a Ph.D.  
5 and hadn't written peer-reviewed articles. I  
6 remembered him leaving open the possibility that I  
7 would be -- have that sufficient expertise in areas  
8 like elections. But as I recall --

9 Q. Do you still --

10 A. -- as I recall, at least, the -- the  
11 final conclusion was that I didn't have expertise  
12 as an elections administrator, which is true.

13 Q. And you're right, the Court did note  
14 that you had never authored a peer-reviewed study  
15 or article, and never been asked to peer review the  
16 work of others. Is that still the case?

17 A. That -- that last sentence is untrue or  
18 the last phrase.

19 Q. How about the part -- was it true at  
20 the time that you had never authored a  
21 peer-reviewed study or article?

22 A. That's true.

23 Q. Is it still true?

24 A. That's still true. I had peer reviewed  
25 other's articles, but I don't know where he got

1 that.

2 Q. Okay. The next is another case called  
3 Ohio Organizing Collaborative, but it's a different  
4 one on political gerrymandering?

5 A. That's right.

6 Q. For -- right.

7 For these cases in your report in this  
8 case, you say that you authored an expert report  
9 and that the cases are, quote, "Pending in original  
10 action before the Ohio Supreme Court;" is that  
11 right?

12 A. That's right.

13 Q. Okay. That's not true anymore; is that  
14 right?

15 A. That was the -- the opinion has come  
16 down. It may have come down by the time I  
17 submitted, and I just updated that, but yeah.

18 Q. That's actually --

19 A. Well, I mean, I guess there is still --  
20 there is still pending because there is this back  
21 and forth going on between the Court and  
22 legislature that's been kind of a nightmare.

23 Q. Do you know --

24 A. I think they had to file -- I think  
25 they had to file -- they had to file a new matter



1 for this last go round, but I don't think they did  
2 for the second and third.

3 Q. Fair to say you don't know where the  
4 case stands right now?

5 A. Oh, I do. Like right now, at least the  
6 Congressional version had to be re-filed as a new  
7 matter. But I don't remember -- you know, we're on  
8 like our fourth version of the maps now, and I  
9 think one, two and three all came out of the same  
10 action.

11 Q. Do you know if there has been an  
12 opinion at all in this case concerning you?

13 A. Yes.

14 Q. Do you know when that came out?

15 A. I think it was mid January.

16 Q. Surprise you to learn it was January  
17 10th?

18 A. That would be mid January, so no.

19 Q. Okay. And you -- you submitted your  
20 report in this case on February 10th, right?

21 A. Correct.

22 Q. So the actions were not pending before  
23 the Ohio Supreme Court when you wrote that; is that  
24 right?

25 A. No, I think they were, because I think

1 that case survived for the first three rounds. And  
2 they only had to file new go rounds for this one.

3 Q. Okay. You didn't put anything about  
4 the January 10th opinion in your February 10th  
5 report in this case?

6 A. That's correct.

7 Q. In the Ohio Organizing Collaborative  
8 case, you compared an enacted map to maps submitted  
9 by other people; is that right?

10 A. No. Well, so define that. I -- I --  
11 as I recall it, it was a -- it was compared to a  
12 counter bailing plan by representative Sykes, but I  
13 don't think it was submitted to the Court.

14 Q. Do you compare an enacted map by a  
15 state government to other maps?

16 A. Yes. To a map that had been offered --  
17 when you said submitted, it sounded to me like you  
18 meant to the Court or by simulations. And I didn't  
19 do that when I wrote my report. To my  
20 understanding, those simulations had been put into  
21 the case. But I did compare it to a map that had  
22 been suggested in the drafting process by  
23 representative Sykes.

24 Q. Okay. Did you read the January 10th  
25 opinion in this case?

1 A. Yes.

2 Q. Okay. Did you read the part that  
3 referenced you?

4 A. Yes.

5 Q. Okay.

6 A. Or at least -- at least one of them,  
7 there maybe others.

8 Q. Uh-uh.

9 In this case you were an expert along  
10 with a person named Michael Barber; is that right?

11 A. Correct.

12 Q. Okay. Can you read this part that I  
13 have highlighted?

14 A. "Dr. Barber and Trende mainly compared  
15 the adopted plan to plans introduced by Senator  
16 Sykes on September 1st and September 15th. They  
17 pointed out the various ways in which Senator Sykes  
18 plans are pro-democratic gerrymanders.

19 Q. Okay. Can you read this part now?

20 A. Yeah. "By showing that other plans are  
21 per Democratic gerrymanders are no noncompliant  
22 with Article -- but showing that other plans of  
23 pro-democratic gerrymanders are noncompliant with  
24 Article XI does not validate the adopted plan."

25 Q. So taken together, does that mean to

1 you that showing that noncompliant maps are not  
2 compliant with the law, does not make the enacted  
3 map legal?

4 A. At least in Ohio, with the  
5 gerrymandering casing, yes.

6 Q. Do you disagree with the Court's  
7 opinion here?

8 A. There is a fair amount of Ohio legal  
9 analysis that was -- that I don't know about  
10 frankly. But I'm assuming, or -- or to my reading,  
11 if you had a choice between a -- what appeared to  
12 be a pro-Republican gerrymandering and a  
13 pro-democratic gerrymandering, as they only  
14 submitted submittal maps before the commission,  
15 that seems relevant to me, but the Court disagreed.

16 Q. Do you think the Court got it wrong?

17 A. I think on this point. I think it is  
18 relevant that -- that the only two plans were  
19 apparently a pro-Republican gerrymandering or  
20 pro-democratic gerrymandering.

21 Q. But the Court --

22 (Simultaneous speaking)

23 Q. I'm sorry. Go ahead.

24 A. On the big picture, I mean, I think  
25 this case was mostly about whether the Court had

1 the power to strike down plans under the Ohio  
2 Constitution, and having found that yeah, I thought  
3 the plan had a Republican lead.

4 Q. But I am asking a specify question,  
5 which is, the highlighted part that you just read,  
6 do you think the Court got that wrong?

7 A. I think so. I think it's a relevant  
8 part of the inquiry. I don't know that it  
9 completely validates it. I don't know that it was  
10 intended to completely win the case one way or the  
11 other, but I think it is relevant to want question.

12 Q. I don't think you have answered  
13 question. Do you think the Court got this part of  
14 the opinion wrong?

15 A. I think I have.

16 Q. And your answer is yes?

17 A. My answer is to the extent that the  
18 question is, is this a relevant consideration that  
19 can be part of an argument for validating it, sure.  
20 For a stand, like standing along, if this were the  
21 only piece of evidence offered by all the  
22 plaintiffs, I guess not.

23 Q. Because logically speaking, showing  
24 that another map is not compliant with the law says  
25 nothing about whether the enacted map is compliant

1 with the law?

2 A. I just said I thought it was relevant.

3 Q. But logically speaking?

4 A. I would like to think I'm not being  
5 illogical. I -- I think it's relevant.

6 Q. Okay. Now this is hard because at the  
7 bottom of the page and the top of the page so I'm  
8 just going to read it.

9 "Nor does it show that the commission  
10 attempted to comply with Article 11 Section 6A when  
11 it drew the adopted plan."

12 Do you take that to mean nor does your  
13 analysis about Senator Sykes' plan show what the  
14 commission attempted to do in drawing its own plan,  
15 is that your reading of that sentence?

16 A. Can you show it to me? Can you scroll  
17 down at the bottom and that would be easier?

18 Q. Sure. Sure.

19 A. Because that's where the -- that's  
20 where it is.

21 Q. You're right. So why don't you read to  
22 yourself, if you don't mind, this sentence starting  
23 with "More."

24 A. Let's see -- More -- I'm sorry. I  
25 think "it" is referring to showing that other plans

1 are pro-Democratic gerrymanders and not compliant  
2 with Article XI. And that is the part of the  
3 analysis from the three experts. So I've forgotten  
4 the original question, but it does seem to go back  
5 to our original opinion.

6 Q. So the question is: Does an analysis  
7 of a non-enacting plan tell us anything about  
8 whether the legislature that enacted the plan  
9 intended or didn't intend to comply with a  
10 particular law?

11 MR. DIAMADUROS: Object to the form.

12 THE COURT REPORTER: I just need to  
13 know who objected, please.

14 THE WITNESS: It certainly suggests the  
15 Supreme Court --

16 THE COURT REPORTER: Who objected,  
17 please?

18 MR. DIAMADUROS: That would be me,  
19 Konstantine Diamaduros.

20 THE COURT REPORTER: Thank you.

21 THE WITNESS: It certainly suggested  
22 the Supreme Court of Ohio thought that showing that  
23 a competing plan was also unconstitutional or it  
24 was also a gerrymander, doesn't mean that it  
25 complied with Article 11 Section 6A of Ohio law.

1 BY MR. TRIVEDI:

2 Q. Do you think the Court got that wrong?

3 A. I don't know even know what is in  
4 Article 11 Section 6A, so I can't opine on that.

5 Q. Can you read this highlighted part?

6 A. Yeah. "Trende does not however offer  
7 an alternative way to measure partisan bias. More  
8 importantly, he does not offer testimony rebutting  
9 Dr. Roddens', R-O-D-D-E-N-S, or Dr. Imai, I-M-A-I's  
10 evidence that it is possible for the commission to  
11 draw a district plan that is compliant with Article  
12 11, and that does not favor republican candidates  
13 so heavily."

14 Q. So, in this case, Dr. Imai submitted  
15 evidence that it was possible for the commission to  
16 draw a complaint plan; is that right?

17 A. Yeah. After I had submitted my report,  
18 he -- he and Dr. Rodden dropped the simulations in.

19 Q. And you didn't offer an alternative way  
20 to measure partisan bias?

21 A. I'm not sure any of partisan bias  
22 metrics are particularly good.

23 Q. You didn't submit evidence rebutting  
24 Dr. Imai's evidence, that it was possible for the  
25 commission to draw a compliant plan?



1           A.    I mean, I -- I couldn't. I submitted  
2 my report, and they did it in their relay, which  
3 was cleverer lawyering. But how was I supposed to  
4 rebut it? I never understood this sentence in the  
5 Court's opinion to be perfectly honest.

6           Q.    Okay. So you think the Court got this  
7 part wrong?

8           A.    I think it was impossible for me to  
9 rebut their testimony since they did it in the  
10 reply, and we didn't have an opportunity to do a  
11 surrebuttal.

12          Q.    You didn't offer it in your affirmative  
13 report, didn't you?

14          A.    We didn't -- the simulations weren't in  
15 the case at that point, so no. How am I supposed  
16 to -- how am I -- how am I supposed to rebut  
17 Dr. Rodden's and Dr. Imai's evidence when it hadn't  
18 been submitted yet?

19          Q.    Were you aware that it was possible to  
20 draw a compliant plan when you submitted your  
21 affirmative report in this case?

22          A.    No.

23          Q.    You thought the only -- it was -- it  
24 was only possible for the state to draw illegal  
25 plans?

1           A.    I had examined the question one way or  
2           the other. I was only asked to compare states plan  
3           to the competing plan, and then one other competing  
4           plan that had been drawn by some citizens  
5           redistricting group, and so that's what I did.

6           Q.    So is your opinion now that it's  
7           impossible to draw a compliant plan in Ohio?

8           A.    I think it's very difficult, because --

9           Q.    Is it --

10          A.    I'm not sure it's -- I'm not sure it's  
11          possible because Ohio's -- and I'm not sure any of  
12          Dr. Rodden's or Dr. Imai's maps particularly were  
13          legal to be honest. Because Ohio's redistricting  
14          laws are incredibly complex and convoluted, and I  
15          don't know how you would possibly -- at least with  
16          Dr. Imai's simulations, I don't know how you would  
17          possibly account for everything.

18          Q.    But the Court seems to think it is  
19          possible?

20          A.    The Court never saw the maps. As far  
21          as I know, no one has seen the maps that were  
22          produced.

23          Q.    What I mean is, they used the word  
24          possible in this opinion, correct?

25          A.    Well, yeah. But like I said, I'm not

1 sure that any of those maps actually comply with  
2 Ohio's convoluted laws.

3 Q. Okay.

4 A. And I don't think the Court is either  
5 because no one has seen those maps. I think Dr.  
6 Rodden was using a constructed Monte Carlo system,  
7 so I find it easier to believe that he had coded it  
8 up to comply with Ohio's bizarre laws. But I  
9 haven't seen Dr. Imai's code either, because,  
10 again, it was submitted as a rebuttal report.  
11 Sorry, I'm a little annoyed by the Court putting in  
12 there that I didn't rebut evidence that there is no  
13 way I could have rebutted.

14 Q. Do you have more to say there?

15 A. No.

16 (EXHIBIT 8, Democratic National  
17 Committee versus Reagan, was marked for  
18 identification.)

19 BY MR. TRIVEDI:

20 Q. I'm going to show you another opinion  
21 in a case that you didn't list in your report or  
22 CV. Do you remember being an expert in a case  
23 called Democratic National Committee versus Reagan?

24 A. No.

25 Q. In Arizona?

1 A. No.

2 Q. About out-of-precinct voting and  
3 third-party ballot collection?

4 A. Okay. I thought that was -- that was  
5 Brnovich.

6 Q. Right.

7 A. Right? Okay. Well, wasn't Reagan the  
8 one that was filed?

9 Q. It was a pretty big case, right?

10 A. Once it made it to Supreme Court, yeah.

11 Q. Yeah. It wasn't big at the District  
12 Court?

13 A. I didn't think so.

14 Q. Okay. But you were an expert in this  
15 case --

16 A. Yes.

17 Q. -- is that right?

18 A. Yes.

19 Q. You didn't list it on your CV or in  
20 your report in this case?

21 A. We will check. But I will assume that  
22 I did not. I will take your word for it.

23 Q. Okay. I am pulling up -- okay. Can  
24 you see this, Mr. Trende?

25 A. Yes.

1 Q. And can you read the highlighted part  
2 for me?

3 A. Yes. "Sean Trende critiqued  
4 Dr. Lichtman's analysis of Arizona's voting  
5 patterns and the history of racial discrimination,  
6 but offered no new information or analysis. The  
7 Court found some of his criticisms worth  
8 considering. Overall, they were insignificant.  
9 For example, although Trende generally agreed with  
10 Dr. Lichtman that there was unexperienced racial  
11 polarized voting. He made much of the irrelevant  
12 fact that Arizona voting is not as variably  
13 polarized as voting in Alabama."

14 Q. So you did not include the piece of the  
15 opinion in the report in this case because you  
16 didn't even include this case in your report; is  
17 that correct?

18 A. Yeah. I should have included this  
19 case.

20 Q. And in particular, this judge says that  
21 you made much of an irrelevant fact that Arizona  
22 voting is not as variably polarized as voting in  
23 Alabama. Did the Court get that wrong?

24 A. I don't think it's irrelevant, but the  
25 Court disagreed.

1 Q. Okay. So this is another case where  
2 you pointed to factors outside of the law at issue  
3 as probative, and this is the second Court that  
4 says it was irrelevant, correct?

5 A. I didn't point to anything as  
6 probative. No experts get asked to answer  
7 questions that the Court may find interesting or  
8 irrelevant. And if the Court doesn't find it  
9 interesting or irrelevant, that's the end of the  
10 case. But I didn't give any -- any legal analysis,  
11 which I think you're suggesting with probative.

12 Q. I'm not suggesting that. Let's use the  
13 word relevant. You say it's relevant that racially  
14 polarized voting is more polarized in Alabama, in  
15 this case, than Arizona. The Court called it  
16 irrelevant, correct? And in the previous case, you  
17 thought it was relevant that the Sykes map was more  
18 of a gerrymander than the inactive map, and the  
19 Court called it irrelevant, correct?

20 A. Yes.

21 Q. Okay. I think we have been going for a  
22 while, and we're about to move onto another  
23 section. So we could take a short break now or  
24 make it a very early lunch. I'll leave that up to  
25 you, Mr. Trende, and your attorneys.

1 THE VIDEOGRAPHER: Let me take us off  
2 the record so it is not on the transcript. 10:56  
3 a.m. We're going off the record.

4 (A brief recess was taken.)

5 THE VIDEOGRAPHER: The time on the  
6 monitor is 11:24 a.m., and we're back on the  
7 record.

8 BY MR. TRIVEDI:

9 Q. Hi, Mr. Trende. We're back on the  
10 record. Are you ready to get started again?

11 A. Yes.

12 Q. Okay. Just for the record, did you  
13 have any conversations with counsel during that  
14 break?

15 A. I e-mailed them the reports that you  
16 requested, but I did not confer with them.

17 Q. Okay. Did they respond to you?

18 A. I would say not to my knowledge and I  
19 can check my Outlook at the next break.

20 Q. Of course. Okay.

21 MR. DIAMADUROS: Just for the record,  
22 we have been responded to that e-mail.

23 MR. TRIVEDI: I appreciate that. Thank  
24 you.

25 (EXHIBIT 9, Report of Dr. Kosuke Imai,

1 was marked for identification.)

2 BY MR. TRIVEDI:

3 Q. So I want to pull up a document that we  
4 have marked Trende Exhibit 9. Mr. Trende, I know  
5 this is a long document, but based on the first  
6 page, do you recognize it?

7 A. It looks like the expert report of  
8 Dr. Imai in this case.

9 Q. Okay. Have you reviewed this document?

10 A. Yes.

11 Q. I'm going to refer to it from time to  
12 time, but I'll take it off screen share now.

13 A. Okay. And you asked what date I would  
14 have gotten started with my report. It would have  
15 been January 24th.

16 Q. I see. Is that the day that Dr. Imai's  
17 report -- you received Dr. Imai's report?

18 A. Almost certainly. I mean, unless they  
19 delayed circulating it by a day, but within --  
20 let's say within the vicinity of January 24th.

21 Q. Great. Thanks for that clarification.

22 Okay. Going to Dr. Imai's report, I'm  
23 scrolling down to -- I'm sorry. I apologize. I'm  
24 going to back to your report where we discussed  
25 Dr. Imai's report.



1 Can you read the two pieces that I have  
2 highlighted right there?

3 A. "I was asked to review the reports of  
4 Plaintiff's experts regarding the newly enacted  
5 districts for the South Carolina House of  
6 Representatives. In the particular, I was asked to  
7 opine on the expert report of Dr. Kosuke Imai and  
8 Dr. Jordan Ragusa, R-A-G-U-S-A." I guess it  
9 skipped in parens, (see my report).

10 Acknowledging referring to them see my  
11 report, Ragusa report throughout this. That's not  
12 a direct quote, but I left out the parentheticals.

13 Getting back to the quote. "I do not  
14 critique Dr. Imai's mathematics here. Instead, I  
15 provide context to assist the Court in evaluating  
16 his maps."

17 Q. Okay. Is it still true that you do not  
18 critique Dr. Imai's mathematics with respect to  
19 this case?

20 A. (Inaudible.)

21 Q. Sir, I think that actually cut out for  
22 me. Could you repeat that answer?

23 A. That's right.

24 Q. Do you agree that his simulations  
25 methodology that he uses in his report is widely

1       accepted?

2               A.     Yes.

3               Q.     And that he applied it correctly in  
4       this case?

5               A.     I assume.  So -- so let's back up.  He  
6       has this new version.  You have to do this special  
7       download from -- my -- my assumption is that it's  
8       fine, and I don't know offer any critique of his  
9       math or methodology.

10              Q.     Do you agree that he is qualified to  
11       conduct this sort of analysis?

12              A.     He seems qualified.  I mean, certainly  
13       to run simulation and write simulation code, yes.

14              Q.     You said earlier that he helped develop  
15       the REDIST package; is that right?

16              A.     Yes.  He is certainly qualified to  
17       write simulation code and run them, yes.

18              Q.     He -- do you know whether he has  
19       published peer-reviewed papers about redistricting?

20              A.     I'm certain he has.

21              Q.     You cite one in your expert report,  
22       don't you?

23              A.     Um, I don't think McCartan and Imai's  
24       paper has been published yet, but I know it's --  
25       it's relied upon, and the method has been relied

1 upon by Courts so...

2 I know the McCartan and Imai paper is  
3 under peer review right now, but I don't think it's  
4 been officially published yet.

5 Q. Okay. By comparison, you have no  
6 peer-reviewed papers, correct?

7 A. Still no peer-reviewed papers.

8 Q. Okay. So starting at page eight in --  
9 in your report, you assert with respect to  
10 Dr. Imai's simulation analysis that 5,000 maps does  
11 not mean 5,000 unique maps; is that right?

12 A. That's right.

13 Q. And as part of your analysis, to come  
14 to that conclusion, you conducted a sampling; is  
15 that right?

16 A. Right.

17 Q. Of how many maps?

18 A. Ten.

19 Q. Okay. To get these ten maps out of  
20 5,000, did you use a random number generator?

21 A. Yes.

22 Q. And which one did you use?

23 A. I think I ran a uniform sample across  
24 5,000 in R.

25 Q. Okay. Did you produce the code or any

1 resulting information or documents that would  
2 confirm your use of that random number generator?

3 A. I think I produced the code, yes.

4 Q. And did that random number generator  
5 produce an electronic or written output?

6 A. It would have created, in R, an object  
7 -- a vector of length ten that had ten numbers in  
8 it.

9 Q. Okay. Did you produce an image of that  
10 vector or list?

11 A. No. Well, I mean, you can see the map  
12 numbers in the map that was produced. So that  
13 would be the vector, or those would all be at least  
14 within the vector.

15 Q. Well, in your expert report you don't  
16 actually produce all ten numbers for any of the  
17 clusters; is that right?

18 A. That's right. There are certain ones  
19 within those ten that produced duplicates within a  
20 sample of ten.

21 Q. Even beyond duplicates, you didn't  
22 produce certain results that the random number  
23 generator produced, correct?

24 A. No.

25 Q. No, you -- when you sampled, for

1 example, ten maps from the Chester cluster, you did  
2 not include all ten maps in your expert report, did  
3 you?

4 A. No, because the point is simply that it  
5 produces duplicates. I mean, that's it.

6 Q. Right --

7 (Simultaneous speaking)

8 A. If your point is just that it produced  
9 duplicates, then you show the duplicates.

10 Q. No, that's not my point. My point is  
11 that you say you ran a sample of ten maps for each  
12 cluster; is that right?

13 A. Right.

14 Q. You didn't include all ten maps for  
15 every cluster in your expert report, did you?

16 A. No, because my only point was that it  
17 produces duplicates.

18 Q. Can you guarantee right now that for  
19 every sampling of ten maps, every map you didn't  
20 put in the report was a duplicate?

21 A. Yes. I'm sorry. Wait. Wait. Wait.  
22 Can you rephrase that? I want to make sure I  
23 answer it correctly.

24 Q. Okay. For all of the clusters, you say  
25 you conducted a ten-map sampling; is that right?

1 A. Right.

2 Q. Okay. For all of clusters, you don't  
3 actually include the ten maps that were the result  
4 of the random sampling in the report itself,  
5 correct?

6 A. Correct.

7 Q. And you haven't produced them to us  
8 otherwise either, correct?

9 A. Correct.

10 Q. So are you saying now, that every map  
11 that is not contained in your report is a duplicate  
12 of something that is contained in the report?

13 A. Oh, no. That's not -- I'm glad we went  
14 through that. No. No.

15 Q. Okay.

16 A. Sorry. There is a negative in there.  
17 Yeah, no. That is not my point.

18 Q. So we have no way of knowing what the  
19 results were for your random sampling unless  
20 they're contained in your report?

21 A. Well, right because the only point is  
22 that it produces duplicates.

23 Q. You just said -- you just said that not  
24 every map that you included from the report is a  
25 duplicate. There are some non-duplicates that you

1 excluded from the report, correct?

2 A. But my point is not -- I'm sorry if it  
3 came across this way as the report. My point is  
4 certainly not that every map within Dr. Imai's  
5 report is a duplicate. I did not mean to suggest  
6 that. There are duplicates. This process will  
7 produce duplicate maps. It's not 5,000 completely  
8 different maps because I think if you don't know  
9 much about how the simulations work, you -- a  
10 natural assumption might be that, you know, these  
11 are just like 5,000 maps that are all radically  
12 different. So like I said at the beginning, I just  
13 think it's important context.

14 Q. But focusing on the sampling point, you  
15 agree that even though all you did was sample ten  
16 for each cluster, you didn't even include all ten  
17 results in your report, correct?

18 A. Oh, that's right. Because my point --  
19 my point is simply --

20 Q. Yeah.

21 (Simultaneous speaking)

22 A. I'm not done with my answer.

23 Q. Please. Please.

24 A. Because my point is not that his maps  
25 don't produce unique maps. It's that they do

1 sometimes produce duplicates.

2 Q. But in coming to your point, you didn't  
3 allow the reader to compare the maps that you  
4 included in the report with maps that were -- with  
5 the other maps that were created by the random  
6 number generator, correct?

7 A. Because I think it's clear from how the  
8 report is written that not every map within the  
9 report is a duplicate.

10 Q. But you also --

11 (Simultaneous speaking)

12 A. I think if a -- I think if a -- if a --  
13 an average reasonable reader sees the header that  
14 says -- you know, it produced -- or not the header,  
15 but sees a sentence saying it produces duplicates  
16 maps, I think then you report duplicates, I think  
17 the natural intuition is that the other six aren't  
18 duplicates. But I'm happy, like I said, if it's  
19 unclear I'm glad we had this opportunity to clarify  
20 it.

21 Q. So could you produce all of the sample  
22 maps that the number generator created that you did  
23 not include in the report?

24 A. Um, I don't know. I don't remember if  
25 I set a seed or not.



1 Q. So those might be gone?

2 A. They might be. I would have to look at  
3 the report and see if there is ten numbers that  
4 appear in the map titles.

5 Q. Is there a way to reproduce exactly  
6 your process for the report, such that you could  
7 recreate the ten map samples for each cluster?

8 A. I mean, no. It's -- it's just a random  
9 sample of maps. You can produce -- you can  
10 certainly replicate a random sample of ten maps,  
11 and you can certainly replicate the maps that have  
12 been produced because they're numbered in the code.  
13 And I'm happy to say that the other six were not --  
14 or the other, however many, were not duplicates.

15 Q. But we can't replicate the exact ten  
16 that you got?

17 A. I don't know if that is true or not  
18 because if there is ten numbers in the maps that  
19 are in the report, then you could. Because I only  
20 -- I only generated the vector once.

21 Q. But there is no cluster for which you  
22 actually produced the map numbers for all ten,  
23 correct?

24 A. Well, that's -- no. You're -- I think  
25 I'm being unclear. You know, if one cluster is

1 1234, another cluster is 5678, and another cluster  
2 is 910, that actually could go back and reproduce  
3 everything.

4 Q. Okay. I was under the impression that  
5 you sampled ten maps for each luster?

6 A. Well, right. But it's -- I only did  
7 the -- I -- I would have to go back and look at the  
8 code. I'm sure if I'm wrong Dr. Imai will let me  
9 know, but I think I only sampled vector once, and I  
10 pulled the same ten maps for all six clusters.

11 Q. So if it possible to recreate the  
12 sampling that you did, meaning, that the ten map  
13 sample for each cluster would be the same as the  
14 one that you analyzed for your report, will you  
15 produce all ten sampled maps for each cluster now?

16 A. No. But I can give you -- I mean, the  
17 numbers will appear in the report, and your experts  
18 are more than able to generate those maps with my  
19 code.

20 Q. But you can't recreate --

21 A. Unless counsel -- unless -- oh, I  
22 could. Unless counsel instructs me to spend their  
23 money recreating these maps, I won't do it, but it  
24 could be done.

25 Q. Okay. Let's go to page nine of your

1 report.

2 A. You're not sharing anything with me by  
3 the way.

4 Q. You said you had your report?

5 A. Yeah. I closed it at the break, sorry.

6 Q. Can you reopen it?

7 A. Okay.

8 Q. Okay. So at the bottom of page nine,  
9 Paragraph 28, you say, "Take for example the  
10 Chester configuration. I selected ten maps at  
11 random from each of Dr. Imai's ensemble of maps."

12 First of all, let me pause there. Do  
13 we agree that ensemble means roughly the same thing  
14 as assimilation?

15 A. Yes.

16 Q. Okay. Great. So you say, "I selected  
17 ten maps at random from of each of Dr. Imai's  
18 ensemble of maps. Four of these appear to be  
19 identical."

20 A. Correct.

21 Q. You didn't say that they are identical,  
22 correct?

23 A. That's right.

24 Q. Are they identical?

25 A. I believe so.

1 Q. Then why didn't you say that they are  
2 identical?

3 A. Because they appear to be identical and  
4 I believe they're identical.

5 Q. But you could have said they are  
6 identical. Instead, you said they appear to be  
7 identical. Is it are they identical or do they  
8 merely appear to be identical?

9 A. I don't think it's either or. I mean,  
10 they appear to be identical, and I don't see how  
11 they could not be. But if someone went through and  
12 did a precinct by precinct analysis and found a way  
13 that they are not, then I would be wrong. I  
14 wouldn't be wrong -- I wouldn't be wrong because  
15 they still appear to be identical and I can't  
16 imagine that they aren't.

17 Q. Okay. But you didn't provide us with  
18 the data, precinct by precinct, to show whether  
19 they're identical or not?

20 A. That's Dr. Imai's maps.

21 Q. But it's your report?

22 A. It's Dr. Imai's maps, and I'm relying  
23 on his code to generate these maps. All I did was  
24 -- all -- all I did was run his codes, so he should  
25 have all of this.

1 Q. I agree. But you used the word, "these  
2 appear to be identical," and not Dr. Imai, right?

3 A. Well, right.

4 Q. Okay. So back to the conversation we  
5 were having a minute ago, you said you sampled ten  
6 maps at random, correct?

7 A. Correct.

8 Q. And how many do you include in your  
9 report?

10 A. It looks like for Chester there are --  
11 it looks like six.

12 Q. So how many --

13 A. Well, there -- there is eight, but six  
14 are taken from the sample.

15 Q. Well, I'm sorry. How many images of  
16 maps are there, first of all?

17 A. For Chester, I believe there are eight,  
18 and six of those are taken from the sample.

19 Q. Okay. So four of the ten from your  
20 sample do not appear in your expert report at all;  
21 is that right?

22 A. Yeah. They're not identical.

23 Q. What do you mean when you say, "they're  
24 not identical?" Not identical to what?

25 A. To the map that's produced.

1 Q. Okay. And you don't remember what  
2 those four looked like, correct?

3 A. Let me check to see. I do have the --  
4 yeah, I can -- I can produce for you the ten maps  
5 from each sample.

6 Q. Okay. Any reason you didn't produce  
7 them before today?

8 A. Well, because these were the maps that  
9 I relied upon.

10 Q. Okay.

11 A. And there is -- there is and you can  
12 see my process in the code.

13 Q. Okay. Was your point in this section  
14 to show maps, first of all, that appeared  
15 identical?

16 A. Yes.

17 Q. Okay. And then on page -- I'm sorry.  
18 Hold on one second. On page 12, you say, "In fact,  
19 just in the ten maps that I randomly sampled,  
20 Dr. Imai's algorithm produces any map that is  
21 almost identical to the map that the legislature  
22 produced."

23 Can I take from that that out of the  
24 ten you sampled, one of them looked, as you say,  
25 almost identical to the enacted map; is that right?

1 A. That's right.

2 Q. If there had been others in your random  
3 sampling of maps that looks almost identical to the  
4 enacted map, would you have included it in the  
5 report?

6 A. Surely.

7 Q. So can we assume then out of the ones  
8 that you didn't produce in the report, they didn't  
9 look like the enacted map?

10 A. Oh, yes.

11 Q. Okay. And out of the -- out of the  
12 images from the sampling that you included, you're  
13 not contending that any of those looked like the  
14 enacted map either, right?

15 A. They don't look at all like it. It's a  
16 different configuration. It keeps the City of  
17 Chester in Chester County.

18 Q. Okay. So just to confirm, in your  
19 ten-map sampling in Chester only one looked similar  
20 to the enacted map?

21 A. Yes.

22 Q. Okay. I'm moving to Sumter on page 14.  
23 In Sumter, did you also do a ten-map  
24 sampling?

25 A. Yes.

1 Q. You didn't include all ten in your  
2 report, correct?

3 A. That's right.

4 Q. In fact, you only included two images,  
5 correct?

6 A. Correct.

7 Q. Okay. You haven't produced the other  
8 eight to us yet, correct?

9 A. That's right.

10 Q. Okay. And for Sumter, you admit that  
11 none of the sampled ten maps look like the enacted  
12 map, correct?

13 A. His process prefers to split it on an  
14 east/west axis.

15 Q. I'm sorry. Where in Dr. Imai's report  
16 does he say, I prefer to split Sumter on an  
17 east/west axis?

18 A. Well, if you take a sample of ten maps,  
19 so, to answer your question correctly, he doesn't  
20 say that. But if you -- and I also didn't say that  
21 Dr. Imai prefers to have that on an east/west axis.  
22 What I said was is -- on the exact code or the fact  
23 of the exact wording here, is that whatever the  
24 parameters of the simulation are, they prefer this  
25 east/west because all ten of the maps split the



1 City or split the county on an east/west axis.

2 Q. I'm sorry. In what document does it  
3 say there is a preference to spit Sumter on an  
4 east/west axis?

5 A. If you pulled a sample of ten maps from  
6 a sample of 5,000 maps, and they're all split on an  
7 east/west axis, some parameter in the simulation is  
8 leading it to prefer, even if it's not explicit, an  
9 east/west split.

10 Q. So there is no explicit parameter that  
11 prefers an east/west split. That just happens to  
12 be what is produced from the parameters that do  
13 exist, correct?

14 A. Well, it's probably a result --

15 MR. DIAMADUROS: Object to the form.

16 THE WITNESS: It's probably a result --  
17 the result of the compactness parameter. Mapmakers  
18 weren't prying with the compactness parameter of  
19 one or whatever Dr. Imai is using, you would get --  
20 probably get different maps.

21 BY MR. TRIVEDI:

22 Q. But you don't know that for sure,  
23 correct?

24 A. No. Dr. Imai is using his  
25 developmental software, and I didn't feel

1 comfortable messing around too much with it.

2 Q. Okay. In terms of preferences,  
3 Dr. Imai did use -- well, okay.

4 Do you agree that Dr. Imai attempted to  
5 simulate the parameters that the legislature,  
6 itself, used?

7 A. I don't know.

8 Q. Okay. Okay. The next cluster is  
9 Richland.

10 A. Uh-huh, yes.

11 Q. For Richland, your report says, "We see  
12 this again in the Richland County group with just a  
13 minor difference rendering these maps distinct; is  
14 that right?"

15 A. That's right.

16 Q. You include two pictures of maps from  
17 Richland, correct?

18 A. Correct.

19 Q. You don't include the other eight from  
20 your sampling of ten, correct?

21 A. That's correct.

22 Q. Okay. You have no data in this section  
23 of Richland explaining how they are similar or  
24 different, these two maps, correct?

25 A. That's correct. I mean, you can look

1 at them and see that the lines are identical except  
2 with a slight difference in how District 2 and map  
3 1393 and District 4 in map 1494 are configured on  
4 the north. A little protrusion on District 2 in  
5 1494 versus 1393, and then the -- I guess it's  
6 District 6 and 8 in both maps have some slightly  
7 different configurations. But I think any  
8 reasonable person looking at these districts would  
9 say they're substantially similar with minor  
10 differences.

11 Q. But you don't assert here that these  
12 two images look anything like the enacted map,  
13 correct?

14 A. That's right. My -- my -- my point --  
15 my general point here is just that you aren't --  
16 you aren't necessarily getting 5,000 radically  
17 different maps, which I don't think people  
18 necessarily intuit when they start out with  
19 redistricting plans or redistricting simulations.  
20 That's -- that's really all there is.

21 Q. Okay. So moving to PD. Here your  
22 analysis is, "We see this again in the PD maps."  
23 You don't say anything more about PD, correct?

24 A. That 's right.

25 Q. Then you have two maps out of your

1 ten-map sampling, correct?

2 A. That's right.

3 Q. Not the other eight?

4 A. That's correct.

5 Q. And you're not contending that these  
6 two maps look anything like the enacted map?

7 A. That's -- that's certainly correct.

8 Q. Okay. Now below the PD section, on  
9 page 18, you say, "To be perfectly clear, I do not  
10 believe that this calls into question the overall  
11 legitimacy of the approach;" is that right?

12 A. Yes.

13 Q. Okay. Your whole point was that some  
14 maps turn out identical?

15 A. Right. That -- that -- that we aren't  
16 getting 5,000 completely, I guess you would call  
17 fresh or unique looks at the map. I think that is  
18 an important context to understand.

19 Q. Okay. Then you use an analogy about  
20 newborn babies in the United States; is that right?

21 A. Right.

22 Q. So what's your analogy?

23 A. If you sampled the weight of newborn  
24 babies in the United States, you would get numbers  
25 around 7.5 repeated because that's where the center

1 of the distribution is for newborn babies.

2 Q. But, mathematically speaking, whether  
3 the mean is at 7.5 because many, many babies weigh  
4 exactly 7.5, or whether many, many babies weighed  
5 7.49 and 7.51 doesn't really matter, right? The  
6 mean is at 7.5 either way, correct?

7 MR. DIAMADUROS: Object to the form.

8 THE WITNESS: Yeah. Yeah. My -- my  
9 point is that if you really have a background in  
10 math and statistics to think about it, this isn't  
11 terribly surprising, and it makes sense when you  
12 think about other things that people sample. I  
13 mean, this -- this -- this part actually is not a  
14 critique of Dr. Imai.

15 BY MR. TRIVEDI:

16 Q. All right. Just to close out this  
17 section, you're aware that the Plaintiffs also  
18 challenged a cluster of districts in Andersen  
19 County; is that right?

20 A. Correct.

21 Q. And this sampling analysis doesn't  
22 address Andersen County at all, is that right?

23 A. It does not.

24 Q. Did you do a ten-map sampling of  
25 Andersen County?

1 A. Yes.

2 Q. You just didn't include it here?

3 A. I didn't have anything to say about it.

4 Q. Okay. You didn't produce to us those  
5 ten maps either, did you?

6 A. No. But they should have the same  
7 numbers as the maps included here. So at the very  
8 least, we should be able to reproduce most of them  
9 from this.

10 Q. Sorry. What do you mean that they  
11 could have the same numbers? Because you have map  
12 numbers in each cluster that are different from  
13 other clusters, right?

14 A. Right. So if you go be the page 11,  
15 you'll see map number 1633. If you go onto page 12  
16 you'll see map number 1494. And if you go on page  
17 15, you'll see map number 1633. And if you go on  
18 page 17, you'll see map number 1494.

19 Q. I see. This is helpful. Okay.

20 So you used the random-number generator  
21 and created the same ten map numbers for all  
22 clusters?

23 A. That's what I mean what I said -- and  
24 -- and I'm sure I will hear about it if I'm wrong  
25 with this in the code. But I said my recollection

1 is that I created -- I had created the vector of  
2 random numbers once.

3 Q. Great. Okay. That is helpful. Thank  
4 you.

5 A. You're welcome.

6 Q. Okay. To go back to your report, in  
7 Paragraph 37 you say, "It does." It meaning the  
8 appearance of duplicates, would you agree?

9 A. Be almost certain exists as duplicates,  
10 right.

11 Q. Right. So it does not -- it does  
12 however give some important context to the peaks in  
13 the histogram. You say, "Those peaks don't occur  
14 because out of all of the possible combinations of  
15 precincts in districts, almost all the racial  
16 breakdowns would be near the peak."

17 Did I read that right?

18 A. Yeah. There is an embarrassing typo in  
19 there, but yeah.

20 Q. I didn't read the typo.

21 A. Sorry about that.

22 Q. Does Dr. Imai claim that almost all  
23 racial breakdowns occur near the peak?

24 A. Oh, no. This isn't -- this is why I  
25 put that sentence up front. That -- I'm not

1 critiquing his mathematics, and why I put in the  
2 paragraph saying, you know, I'm not critiquing the  
3 overall legitimacy of the approach. What I want  
4 the people evaluating these maps to understand is  
5 -- is that because his software weights or his  
6 package, when it's trying to decide mass select  
7 weights them with certain parameters, it's going  
8 to -- it's going to -- some maps are going to be a  
9 lot more likely to be selected than others. And  
10 so, you know, there -- there -- there -- it's just  
11 not like -- when -- when you say randomness to most  
12 people, they think like a dice or the lottery. You  
13 know, where it's to use mathematical geek terms as  
14 a uniform distribution.

15 Q. Uh-huh.

16 A. And I don't -- that -- that's not how  
17 that works because it gives preference for certain  
18 maps to be drawn, which is why you see these  
19 repetitions. It is a different shape. That is all  
20 I'm saying.

21 Q. But you agree that that State  
22 Legislature also had parameters that they did not  
23 made uniform distribution, correct.

24 A. Correct.

25 Q. Okay. And I just want to focus on -- I



1 take your point that you just made. I just want to  
2 focus on your use of the term "Almost all the  
3 racial breakdowns would be near the peak." And get  
4 your agreement that Dr. Imai's histograms don't  
5 claim that almost all racial breakdowns occur near  
6 the peaks. His why access tells you exactly what  
7 proportion of the racial breakdowns occur at the  
8 peak; is that right?

9 A. I mean, I think for like Chester  
10 County, if I'm looking at this histogram of page  
11 eight correctly, it does suggest that out of his  
12 sample, you know, 60 percent of the maps or 70  
13 percent of the maps are at the peak. And that  
14 doesn't mean 70 percent of all unique, randomly  
15 drawn possible maps. It's -- it's the maps that  
16 are drawn according to the parameters of the  
17 software that can produce lots of duplicates in  
18 very very similar maps.

19 Q. Right. And so I'm glad you pointed me  
20 back to the histograms on page eight. That is  
21 exactly my point that 60 -- 70 percent, for  
22 example, of plans in district 41 have a BVAP around  
23 40 percent, do you agree?

24 A. 70, I would say, but yeah.

25 Q. Okay. That doesn't say almost all,

1 correct?

2 A. It kind of considers 70 percent almost  
3 all, but...

4 Q. You would?

5 A. Yeah. And you got another 20 percent  
6 in the immediately adjacent histogram. So that's  
7 90 percent, very near the peak so...

8 Q. Okay. And, therefore, you would agree  
9 that the enacted plan that is above 50 percent is  
10 not near almost all the outputs, correct?

11 A. Yeah.

12 Q. Okay. So I have one more question  
13 about --

14 A. We -- we -- we can quibble about  
15 whether it's near or not. I -- I -- whether it's  
16 much higher, but it's different.

17 Q. Okay.

18 A. And one other thing on almost all. If  
19 you look at District 43, that -- that, to my eye at  
20 least, appears to be 85 percent of the districts at  
21 this, you know, just below 30 percent BVAP, which  
22 to me is almost all.

23 Q. Okay. I have one question about  
24 clusters with a small number of districts, but  
25 let's stick with Chester. Chester has two

1 districts, correct?

2 A. Right.

3 Q. The cluster that the -- the Plaintiffs  
4 -- the cluster that the Plaintiffs call Chester has  
5 two districts, correct?

6 A. Correct.

7 Q. Wouldn't you then expect, with only one  
8 line dividing two districts, that there would be a  
9 lot of maps that are similar or substantially  
10 similar?

11 A. I think this is -- first off, I would  
12 expect it because I have been dealing with these  
13 simulations for a while. I don't know that an  
14 average observer would.

15 Q. I'm just asking about you.

16 A. Well, I know. And -- and I have a  
17 different perspective on this than most. It -- it  
18 didn't surprise me that a lot of these maps look  
19 the same for the simulation. I don't know if  
20 people were just randomly drawing maps without a  
21 compactness parameter of one, whatever that means  
22 programmed into their heads, that you would get a  
23 bunch of maps that look almost identical, because  
24 there is a lot of different combinations you can  
25 draw here.

1 Q. But you do know that the legislature  
2 had certain parameters, correct?

3 A. I don't know that they had compactness  
4 parameter of one in mind or a compactness parameter  
5 of anything. Or that they would have had the  
6 Polsby-Popper definition of compactness in mind.  
7 But they probably had some big parameters in mind,  
8 yes.

9 Q. Okay. Okay. On page 19 of -- of your  
10 report, you have it that districts often persist  
11 out of habit as much as anything else; is that  
12 right?

13 A. Yes.

14 Q. You don't cite any scholarship for this  
15 assertion; is that right?

16 A. No. It's my experience drawing maps,  
17 for example. And having studied district lines for  
18 a long time, you rarely see a legislature  
19 completely -- excused me, wiped the slate clean and  
20 draw again.

21 Q. Have you written a peer-reviewed paper  
22 about that?

23 A. No. But if someone wants to suggest to  
24 suggest to rebuttal those pictures routinely wipe  
25 the slate clean in redistricting, I -- I would like

1 to see it. But I don't think you'll find any one  
2 to say that.

3 Q. But you haven't found anyone to say  
4 that district often persists out of habit as much  
5 as anything else either, have you?

6 A. Well, in my experience drawing maps,  
7 actual maps, yes. In my experience studying  
8 congressional districts for a dozen years now,  
9 professionally, yeah. I mean -- we have had -- had  
10 9th District Virginia located in the panhandle for  
11 probably 100 how. And when we were drawing in  
12 Virginia, even though we were trying to draw from a  
13 blank slate, we always referred to the 9th District  
14 in Southwest Virginia because we both knew that.

15 Q. Okay. But, again, you're basing this  
16 on your personal experience?

17 A. I mean, yeah. My personal experience  
18 and training.

19 Q. Okay. You don't cite any peer-reviewed  
20 studies or mathematical models supporting the  
21 assertion that district often persists on habit as  
22 much as anything else?

23 A. No. It's my professional experience  
24 and training assessment.

25 Q. When you say, "As much as anything

1 else," do you think habit is equally as relevant a  
2 factor as other things?

3 A. What paragraph are we on?

4 Q. Page 19. Paragraph 38.

5 A. Oh, no. That's not a specific  
6 probability.

7 Q. Okay. So later in that paragraph, you  
8 say that, for example, "The pairing of the City of  
9 Chester with Fairfield County could be the result  
10 of habit or path dependency;" is that right?

11 A. Yeah, core retention.

12 Q. You don't say, "core retention" though,  
13 you say, "habit or path dependency," correct?

14 A. Yeah, but it's the same concept.

15 Q. Then you write, "The map drawers could  
16 reasonably have had this configuration in mind out  
17 of habit, rather than out of any nefarious purpose,  
18 correct?

19 A. Right.

20 Q. But you can't prove that, correct?

21 A. No. I don't purport to.

22 Q. Okay. You don't include any evidence  
23 that that is actually the case, right?

24 A. No. I don't purport to do that either,  
25 no.

1 Q. And you didn't talk to any of the map  
2 drawers as to whether they had a various purpose or  
3 not, did you?

4 A. No. And I'm assuming if you had good  
5 evidence, as they did, that's -- that's going to be  
6 a different look.

7 Q. And on this habit-based explanation, we  
8 talked about your New York report a moment ago, and  
9 we'll get to it again. But it's not contained  
10 anywhere in your New York report, is it?

11 A. No.

12 Q. Or your Maryland report?

13 A. No. Well, no because this Maryland is  
14 ridiculous, but no.

15 Q. Okay. Let me take a quick pause.

16 THE VIDEOGRAPHER: I'll take us off the  
17 record. Sorry. The time on the monitor is 12:05  
18 p.m. Going off the record.

19 (A brief recess was taken.)

20 THE VIDEOGRAPHER: The time on the  
21 monitor is 12:09 p.m. We're back on the record.

22 BY MR. TRIVEDI:

23 Q. Hey. Welcome back, Mr. Trende. I have  
24 to ask, did you speak to counsel during this break?

25 A. No.

1 Q. Okay. I'm moving to Page 21 of your  
2 report, which discusses the gerrymandering index.  
3 Can you tell us what that is?

4 A. That is something that was provided --  
5 proposed by Bangia and suggested by McCartan and  
6 Imai in their article on sequential Monte Carlo.  
7 It's a way of trying to summarize how extreme a map  
8 is relative to the distribution produced by the  
9 ensemble.

10 Q. And again, by ensemble, we mean  
11 simulations, equivalently?

12 A. And let's just stipulate for time that  
13 ensembles are just the results of simulations.

14 Q. Great. And under the gerrymandering  
15 index approach, is it fair to say that the farther  
16 the map in question is from the mean, the more  
17 gerrymandered it is?

18 A. The -- the stronger the evidence that  
19 it wasn't being drawn with the same parameters as  
20 the existing map, yeah. The more likely it is that  
21 some other consideration predominated.

22 Q. So in a racial gerrymander, the farther  
23 the map in question is from the beam, the more race  
24 considerations predominate?

25 A. If all the other -- if every other



1 consideration besides race is accounted for in the  
2 map, then yes, or in the ensemble, then yes. If  
3 every other consideration is not accounted for, you  
4 know, if people were drawing with Re-occ (ph) in  
5 mind instead of Polsby-Popper about the compactness  
6 parameter of one, then it could be that one of  
7 those considerations is responsible for the  
8 deviation. But your inference becomes stronger on  
9 whatever other theory you posit.

10 Q. The farther the target map is from the  
11 beam?

12 A. Right.

13 Q. And speaking of the difference between  
14 the mean and the target map, there are different  
15 ways to measure that difference, right?

16 A. Sure.

17 Q. One of them is standard deviations?

18 A. Yes.

19 Q. Another way is to simply look at the Y  
20 axis and see if the target map has a higher  
21 gerrymandering index figure than the mean, correct?

22 A. The X axis, yeah.

23 Q. I'm sorry. Yes. The X axis, where the  
24 gerrymandering indentation is, correct.

25 I'll rephrase that. You can look at

1 the X axis of your graphs, and see if a target map  
2 has a higher gerrymandering index on the X axis,  
3 than where the mean looks to be; is that right?

4 A. Correct.

5 Q. But that's not as precise, because you  
6 can tell the exact number of the gerrymandering  
7 index either for the mean or for the target map,  
8 correct?

9 A. Oh, yeah. I mean, it -- yes.

10 Q. Okay. So, for example, speaking again  
11 of the X axis, if the mean on the graph is about 50  
12 percent, and a single map in question is at 10  
13 percent, can we say that the map in question is  
14 five types less gerrymander, give or take?

15 A. Well, again, we're -- we're -- if we  
16 will stipulate that this is all assuming that every  
17 consideration except for politics is accounted for,  
18 then -- then that's a useful way to refer to it,  
19 yes.

20 Q. But you just said the word politics I  
21 think by accident. Do you mean race?

22 A. Force of habit. Yes, race, in this  
23 context.

24 Q. Okay. In your report, though, you  
25 didn't actually give us the gerrymandering index

1 numbers for each of these analyses that you ran; is  
2 that right?

3 A. Right.

4 Q. You just gave us graphs, correct?

5 A. With relative positioning, yeah.

6 Q. And you didn't report the mean for each  
7 graph, correct?

8 A. That's right.

9 Q. And you didn't report the number of  
10 standard deviations from the mean of any of the  
11 maps that you analyzed; is that right?

12 A. That's right.

13 Q. Did you produce those actual numbers to  
14 Plaintiffs?

15 A. I think I -- I think I gave you the  
16 code to produce gerrymandering indices, but I don't  
17 believe that I have calculated those numbers. It's  
18 a relative -- it's a relative analysis so...

19 Q. Sorry. What do you mean, "It's a  
20 relative analysis?"

21 A. Well, so, this analysis is looking kind  
22 of three different maps to compare to each other,  
23 and to the body of the distribution of -- if the  
24 gerrymandering indices. So it's how these plans  
25 perform relative to each other as much as anything

1 else.

2 (Simultaneous speaking)

3 A. If something -- and if something is  
4 completely outside the distribution of the  
5 gerrymandering index, I mean, then, you know, it's  
6 -- not going to say it's irrelevant, but I -- I  
7 think the point is made either way.

8 Q. Okay. But just on what the graphs tell  
9 us and what they don't, there is a mean for each of  
10 the graphs that you have put into your report,  
11 correct, a numeric figure, correct?

12 A. How it exists, yeah.

13 Q. Right. But we don't have it in the  
14 report?

15 A. I mean, no.

16 Q. Okay. And you didn't produce it as a  
17 numeric figure to us, correct?

18 A. No. If it's something that Plaintiff's  
19 experts think is relevant, they should be able to  
20 reproduce it from my code and do whatever  
21 calculations they're interested in.

22 Q. Okay.

23 A. But I -- from my analysis, I didn't  
24 think it was relevant.

25 Q. Okay. Did you think producing the

1 standard deviations from the mean for any map that  
2 you analyzed was relevant?

3 A. I don't think so.

4 Q. Okay. The gerrymandering index was  
5 designed to be used in the partisan gerrymandering  
6 context, correct?

7 A. Correct.

8 Q. You're using it here on a racial  
9 gerrymandering case; is that right?

10 A. That's right.

11 Q. So would you say that changing the  
12 variable that you're controlling for doesn't change  
13 the validity of the approach?

14 A. Well, that's a -- that's -- that's a  
15 little bit of a broad generalization. I don't  
16 think I can -- I can't admit to that that broadly.

17 Q. Does controlling for race and not  
18 partisanship render the gerrymandering index  
19 useless?

20 A. I don't think so.

21 Q. Okay. You didn't include any caveats  
22 in your report saying that the gerrymandering index  
23 is less valid for racial gerrymandering than for  
24 partisan gerrymandering; is that right?

25 A. I don't -- I don't think it would be,

1 but I could be persuaded on that.

2 Q. Okay. Okay. So I want to dive into  
3 the -- the graphs themselves, but I have a  
4 clarification. So on page 24 of your report, you  
5 produce a graph showing that gerrymandering index  
6 -- or starting on page 24 you show graphs for  
7 several clusters. But there is a chart on the top  
8 of page 24, and a chart on page 25 labeled as the  
9 "Distribution of Gerrymandering Index for Andersen  
10 Cluster."

11 Do you see that?

12 A. Yeah. That's probably a typo or I  
13 didn't update the title. Yeah.

14 Q. No problem. Can you tell by eyeballing  
15 it, which if either, are Andersen?

16 A. No.

17 Q. Okay. So I'll skip that one for now,  
18 putting on the record that we may have to hold open  
19 the deposition, including for other reasons  
20 previously stated on the record, but also because  
21 we can't tell what these two graphs are, correct?

22 A. You -- you can note what you would like  
23 for the record.

24 Q. Oh, okay. But I'm asking you to  
25 confirm. You can't confirm just by eyeballing it

1       whether either of these two are Anderson, or  
2       whether if one of them is Andersen what the other  
3       one is?

4               A.     Oh, I'm certain one of them is  
5       Andersen. I can't confirm which one.

6               Q.     Okay. Okay. So let's go to page 24  
7       where you talk about Chester.

8                     Do you see that?

9               A.     Yes.

10              Q.     Okay. In Chester, the enacted map is  
11       outside the distribution; is that right?

12              A.     So I'm color blind.

13              Q.     Okay.

14              A.     But I'm going to assume, looking at  
15       this, that this is the middle one that's red, so,  
16       yes.

17              Q.     You note that there is a heavy cluster  
18       of maps, quote unquote, "Heavy cluster of maps  
19       around one percent on the gerrymandering index;" is  
20       that right?

21              A.     That is right.

22              Q.     And it looks like, based on the Y axis,  
23       that over 3,500 of the 5,000 simulated maps are  
24       around one percent gerrymandering index; is that  
25       right?

1 A. That's right.

2 Q. Is it fair to say that the mean is  
3 likely around one percent as well?

4 A. Yes.

5 Q. Okay. And I know it's tough to see,  
6 but would you agree that the enacted map in red,  
7 the middle of the three, is around nine percent?

8 A. Yes.

9 Q. Okay. You also say that there are,  
10 quote unquote, "Clusters of maps that produce  
11 similar gerrymandering indices to the enacted  
12 plan," right?

13 A. That's right.

14 Q. I assume you're talking about these  
15 small bars around 7.5 percent and eight percent?

16 A. Yes.

17 Q. Can you say roughly how many maps that  
18 constitutes out of the 5,000?

19 A. 3,500 here, we have got 4,000. A  
20 couple hundred maybe.

21 Q. Okay.

22 A. Maybe.

23 Q. But when you say that there are  
24 clusters of maps that are similar to the enacted  
25 plan, you mean a couple hundred out of 5,000?



1           A.     Which isn't surprising since we know  
2     that simulations produce maps that look a lot like  
3     the enacted plan in Chester County.

4           Q.     I'm sorry? The -- you said the  
5     simulation produces a lot of plans that look like  
6     the enacted plan in Chester?

7           A.     Yeah. We -- we just -- we just went  
8     through that.

9           Q.     I'm -- I'm not sure we did. So I  
10    thought we just established that thirty -- over  
11    3,500 of the maps have a gerrymandering index  
12    around one percent, but the enacted map has an  
13    index of nine percent?

14          A.     Yeah. But, if --

15          Q.     -- you can contend that though -- that  
16    can still mean that the enacted map looks like the  
17    mean?

18          A.     I didn't say it looks like the mean.

19          Q.     Okay.

20          A.     We were talking about this cluster --  
21    this cluster of maps out on the right, that's  
22    similar to the enacted plan. And I'm just saying  
23    it's not surprising that we have these bars outside  
24    the enacted plan because when you look at the maps  
25    in the sample, there are maps generated that look

1 like the enacted plan, so of course they're going  
2 to generate similar gerrymandering indices.

3 Q. Right. But as a -- as a matter of  
4 numbers, there are only, what you said, a couple  
5 hundred that actually look like the -- anything  
6 like the enacted map while there are many more that  
7 don't look like it, correct?

8 A. I'm guesstimating it's about a couple  
9 of hundred, but one out of 20, to me, is a lot of  
10 maps when you are talking about 5,000 maps.

11 (Simultaneous speaking)

12 A. But I will -- but I will agree with  
13 you, and I am not even trying to remotely suggest  
14 that the mean, or the mode, or those factors are  
15 out of the enacted plan.

16 Q. Okay. And you said a moment ago that  
17 the enacted plan is outside the distribution here?

18 A. Yes.

19 Q. Okay. Again, you didn't calculate the  
20 standard deviation between the enacted map and the  
21 mean here, did you?

22 A. That's right.

23 Q. So, would it surprise you to know that  
24 it is 4.14 standard deviations from the mean?

25 A. That's actually smaller than I would

1 have thought, but, yeah, okay.

2 Q. Okay. So on page 25, we, again, have  
3 the thing that's called Andersen, so I'm going to  
4 skip that one. But on the bottom of page 25 you  
5 say -- you say in your report, sorry, "In  
6 Orangeburg it is a similar story."

7 Do you see that?

8 A. Yeah, and I can see what happens now.  
9 Yeah, that is the -- well, yeah. That's -- that's  
10 the Orangeburg map produced twice.

11 Q. Okay. You're saying that the map  
12 labeled "Andersen" on page 25 is actually a  
13 reproduction of Orangeburg map at the top of page  
14 26?

15 A. Yeah. I think -- I think that  
16 paragraph 52 was probably just meant to come out  
17 and never did in an edit.

18 Q. Okay. Okay. So then let's talk about  
19 Orangeburg. You say, "In Orangeburg it is a  
20 similar story." There is no other text there,  
21 correct?

22 A. Right.

23 Q. So when you say, "It is a similar  
24 story," you're saying that the enacted map is  
25 outside of the distribution?

1           A.    No.   The point here was that the -- the  
2           -- I guess here is the enacted plan, the NAACP  
3           plan, or both outside the -- the bulk of the  
4           distribution.

5           Q.    But the enacted plan is outside of the  
6           bulk of the distribution, correct?

7           A.    (Inaudible).

8           Q.    Sorry.   Sorry.   I didn't hear an answer  
9           to that?

10          A.    I said right.

11          Q.    Oh, sorry.   There -- there are times  
12          when you're -- you're cutting out just for a  
13          second.   Okay.   I appreciate that.

14                   (Simultaneous speaking)

15          THE WITNESS:   Madam Court Reporter, am  
16          I cutting out for you, too?

17          THE COURT REPORTER:   Sir, that time you  
18          did, yes.

19          THE WITNESS:   Okay.   I'll try to hold  
20          the microphone closer to my mouth.

21          Q.    I honestly think it's a -- it's a --  
22          nothing we can do.   It happens sometimes.   I can  
23          here 99 percent of what you're saying.

24          A.    Okay.

25          Q.    You're within the mean.

1                   Okay. So in Orangeburg, we calculated  
2                   the standard deviation, and got 3.84 standard  
3                   deviation between the mean and the enacted plan.  
4                   Any reason to think that's wrong?

5                   A. No.

6                   Q. Okay. On page 27, we have the PD  
7                   cluster; is that right?

8                   A. That's right.

9                   Q. Okay. And in your report you say the  
10                  enacted plan is not within the expected  
11                  distribution in PD here, correct?

12                  A. That's right.

13                  Q. Okay. We calculated the standard  
14                  deviation here, and we got 4.53 standard  
15                  deviations. Does that surprise you?

16                  A. I -- I mean, I thought it was a little  
17                  larger, but that seems right.

18                  Q. Okay. So next on page 28, is the  
19                  Richland cluster.

20                         Do you see that?

21                  A. Yeah.

22                  Q. Okay. For Richland you say that the  
23                  enacted map falls on a "Cluster of maps," quote  
24                  unquote, is that right?

25                  A. Yes.

1 Q. It doesn't fall on the largest cluster,  
2 correct?

3 A. Oh, no. No, I think that's obvious.

4 Q. It's not at the mean either?

5 A. No. I think -- again, that's obvious  
6 as well.

7 Q. Okay. So in Sumter now on the -- at  
8 that same page, the enacted plan is entirely  
9 outside the distribution, correct?

10 A. That's the enacted plan, which looks  
11 like -- yes.

12 Q. We also calculated the standard  
13 deviation here and got 5.72 standard deviations.

14 Does the seem right to you?

15 A. I don't have any reason to disagree  
16 with it. That one was larger than I would have  
17 expected, but, I mean, I am just eyeballing the  
18 data.

19 Q. Okay. For this map would you say it's  
20 impossible to draw something near the mean?

21 A. No.

22 Q. Why is that?

23 A. Well, I wouldn't say that for any of  
24 them because obviously it's possible because you  
25 have simulated maps that appear near the mean, and

1 this one it looks like -- in this cluster, at  
2 least, it looks like Dr. Duchin's map is near the  
3 means as well.

4 Q. Okay. Great. So now I'm going to turn  
5 to your New York report. Give me one second to  
6 pull it up. Sorry. I'm having a tech issue this  
7 time.

8 A. I didn't do it.

9 Q. Okay. Do you see that now?

10 A. Yes.

11 Q. Okay. Is this your expert report in  
12 New York that we pulled up earlier?

13 A. Yes.

14 Q. Okay. So I want to go down to page 14.  
15 Okay. Do you see where you say, "The ensemble maps  
16 have on average a gerrymandering index of around  
17 7.5 percent. The enacted two congressional map on  
18 the other hand has a gerrymandering index of 17  
19 percent. Almost six standard deviations from the  
20 mean."

21 Did I read that right?

22 A. You did.

23 Q. Then the next thing you say is, "The  
24 probability that the enacted congressional map will  
25 be drawn by map drawers who care only about the

1 constitutional mandate for compactness and avoiding  
2 undue partisan influence is vanishingly small."

3 Did I read that correctly?

4 A. That's right.

5 Q. The next sentence says, "Put simply, it  
6 is implausible, if not impossible, that this map  
7 was drawn without a heavy reliant upon political  
8 data, and was likely drawn to favor or disfavor a  
9 political party;" is that right?

10 A. That's right.

11 Q. So is it fair to summarize it to say,  
12 multiple standard deviations from the mean in the  
13 gerrymandering index in New York, indicate that  
14 partisanship was almost certainly the reason for  
15 the drawing of the map, correct?

16 A. Well, right. Because we had control  
17 for compactness, and avoiding undue partisan.  
18 Well, I guess we had control for compactness at  
19 that point.

20 Q. Right. And in South Carolina, we're  
21 also controlling for compactness, correct?

22 A. Well, I demonstrated -- maybe Dr. Imai  
23 did this, too, and I have forgotten. But I had  
24 demonstrated that the compactness of the maps lined  
25 up with what the legislature had actually drawn.



1 So I was actually pretty confident that the  
2 legislative team, even if they didn't know it, were  
3 drawing with this compactness method in mind. Now,  
4 of course, the Defendants came back and said, well  
5 you didn't call for this, this, and this. And I  
6 did have a control for those things to support the  
7 distribution -- or support the conclusion.

8 Q. And that's in New York you're talking  
9 about, correct?

10 A. That's right.

11 Q. Yeah, okay. So in -- in New York it  
12 seemed evident that they were controlling for  
13 compactness; is that right?

14 A. They were controlling for compactness  
15 at the same level that the simulations were.  
16 Because when you ran the compactness analysis on  
17 the enacted plan it fell in the center of  
18 distribution of the -- of -- of the ensemble.

19 Q. Right. And the variable that they were  
20 controlling for though -- I'm sorry. Let me start  
21 over.

22 The variable that you were controlling  
23 for was partisanship, correct?

24 A. Well, I was control -- I was examining  
25 partisanship, and I was controlling for

1 compactness. I think that was the only parameter  
2 that I had to build into the sim -- and -- and  
3 continuity of course. I think that was the only  
4 parameter I had built into the simulations at that  
5 point.

6 Q. And that's helpful. So you were  
7 examining partisanship there using the  
8 gerrymandering index, correct?

9 A. That's right.

10 Q. Okay. And your conclusion was that at  
11 that number of standard deviations away from the  
12 mean, it was implausible, if not impossible, that  
13 the map was drawn without heavy reliance on  
14 partisanship?

15 A. That's right. And then like I said,  
16 they came back and said there were all these other  
17 things that they considered. So you had to build  
18 those into the simulations, which is in the  
19 rebuttal report.

20 Q. So we just talked a moment ago about  
21 how the gerrymandering index can also be used for  
22 racial gerrymandering. In fact, that's what you  
23 used it for, correct?

24 A. That's right.

25 Q. So isn't it correct then that if an

1 enacted map is several standard deviations from the  
2 mean, in a rational gerrymandering index, that that  
3 also means that it is implausible, if not  
4 impossible, that the map was drawn without racial  
5 consideration?

6 A. Controlling -- or if Dr. Imai is  
7 controlling for everything else. I mean, it is  
8 tricky in the South separating race from  
9 partisanship. There may be a political  
10 gerrymander. There maybe other things. I have no  
11 idea what is going on in discovery, and what people  
12 have said, you know, what other factors that may or  
13 may not have raised. But, yeah, if everything is  
14 property controlled for, besides race, then you  
15 know that race played a factor in drawing the  
16 districts.

17 Q. In fact, it's close to impossible that  
18 it didn't, correct?

19 A. Yeah.

20 Q. And the standard deviation numbers that  
21 I just read off track with that opinion, that it's  
22 almost impossible, the races didn't play a factor?

23 A. If everything else is properly  
24 controlled for in the ensemble, then, yeah.

25 Q. Do you have any reason to believe that

1 things weren't properly controlled for in the  
2 ensemble?

3 A. Like I said, I have no idea. I  
4 genuinely have no idea what is come out in  
5 depositions and discovery. I don't have an opinion  
6 one way or the other there.

7 Q. Well, I just mean looking at Dr. Imai's  
8 methodology and data, do you have any reason to  
9 think that he didn't properly control for  
10 everything but race?

11 A. I think I answered that. I don't know  
12 what other things have been raised. People are  
13 saying no, they're trying to hurt democrats there.

14 I -- I honestly don't know. So I can't  
15 express an opinion one way or the other. That is  
16 the lawyer's job, not mine.

17 Q. Okay.

18 A. I will say, I -- I -- when I was  
19 practicing, the advice I gave experts was it's not  
20 your job to win the case for us, just answers the  
21 questions, and that is something that I have tried  
22 to take very seriously in my expert work.

23 Q. Okay. There is an opinion now in the  
24 New York case; is that right?

25 A. That's right.

1 Q. Do you know generally what it says?

2 A. I know it struck down the maps. It  
3 came down right before I left for vacation, so I  
4 haven't had a chance to read it.

5 Q. Okay.

6 A. Honestly.

7 Q. So before we get to the opinion, in New  
8 York there were also factors that you didn't  
9 control for, right?

10 A. I think we controlled for them as well  
11 as the legislature did. So I'm not sure that's  
12 true.

13 Q. Well, are there factors that the  
14 legislature considered that you didn't?

15 A. They made the claim, but I don't  
16 particularly buy it.

17 Q. Oh. They say they controlled for  
18 communities of interest, for example?

19 A. Exactly. And I look at those maps and  
20 I don't really believe that they did. I -- I -- I  
21 have done a lot of work on Congressional districts,  
22 and did the Almanac American Politics for New York,  
23 and I'm not aware of a community of interest that  
24 would require you to merge the Hamptons with the  
25 districts in -- you know, that's all the way out to

1 Nassau County, bypassing all the republican  
2 precincts along the way. So I'm pretty sceptical  
3 with the claim, or -- or that would connect Yonkers  
4 with Yorktown.

5 Q. But you just -- are you saying they're  
6 lying about what they controlled for?

7 A. I don't think they really controlled  
8 for communities of interest, no.

9 Q. Okay. Are there any other factors that  
10 they controlled for, that they say that they  
11 controlled for in New York, that you think that  
12 they're lying about?

13 A. I think we controlled for -- no. I  
14 think we controlled for everything else. And I  
15 shouldn't say they're laying about it. But I think  
16 they were -- a better way to put it is I think they  
17 were opportunistic when they controlled for  
18 communities of interest.

19 Q. But you definitely didn't control for  
20 communities of interest?

21 A. I wasn't interested in drawing maps  
22 that were opportunistic for drawing communities of  
23 interest, no.

24 Q. So that's a no?

25 A. Like I said, no. I -- I -- I just -- I

1 don't think it would have gone over well if I had  
2 drawn maps that were programmed to select those  
3 city's interests in an opportunistic way.

4 Q. Okay. I'm going to show you -- well,  
5 let me ask you the question. You just said, with  
6 respect to virtually all the clusters we discussed,  
7 that the enacted map was outside the distribution;  
8 is that right?

9 A. That's right.

10 Q. Okay. So I know you said that you  
11 haven't had a chance to read the New York opinion,  
12 but, here it is.

13 Do you have any reason to believe this  
14 isn't it?

15 A. No.

16 Q. Okay. I can't highlight this because  
17 it's not text readable. But do you see in the  
18 middle of the page where it says, "One does not  
19 reach the worst of 5,000 maps by chance?"

20 Do you see that?

21 A. That's right.

22 Q. Do you agree with that?

23 A. Yeah.

24 Q. Okay. And the Court goes on to say,  
25 "Therefore, the Court agrees with petitions that

1 the congressional map was unconstitutionally drawn  
2 with political bias;" is that right?

3 A. That's right.

4 Q. And in our case, we just established  
5 that if something is, quote unquote, "The worst of  
6 5,000 maps here," it was almost certainly drawn  
7 with racial bias?

8 A. If everything else was properly  
9 controlled for, yeah.

10 Q. Okay. Can we take another short break?  
11 Really short this time? Thank you.

12 A. How short is short? I will be back.

13 Q. Ten minutes.

14 A. Got it.

15 THE VIDEOGRAPHER: The time on the  
16 monitor is 12:41 p.m. We're going off the record.

17 (A brief recess was taken.)

18 THE VIDEOGRAPHER: The time on the  
19 monitor is 12:58 p.m. We're back on the record.

20 BY MR. TRIVEDI:

21 Q. Welcome back, Mr. Trende.

22 A. Hello.

23 Q. Did you speak with your counsel during  
24 that break?

25 A. I e-mailed another report to them, but



1 they did not respond, and I did not have any  
2 substantive conversation, no.

3 (EXHIBIT 13, Ragusa Report, was marked  
4 for identification.)

5 (EXHIBIT 14, NAACP House Submission,  
6 was marked for identification.)

7 BY MR. TRIVEDI:

8 Q. Thank you. So I want to move now to  
9 the section of your report that discusses  
10 Dr. Ragusa's report, that starts on page 29.

11 So first a clarification, which  
12 sections or analyses of Dr. Ragusa's report did you  
13 analyze for your report?

14 A. Um, I don't know. I don't have his  
15 report in front of me.

16 Q. Okay. I can pull that up for you.

17 A. If you want a general response, it  
18 looks like it is a response to his approach where  
19 he is doing the logistic regression analysis of  
20 precincts that could have gone in and out of a -- a  
21 district.

22 Q. Okay. So I think that is only Model 1  
23 or Analysis 1, but let me pull it up for you to  
24 make sure that you agree.

25 A. I'll tell you what. To make our lives

1 easier, I will pull up his report, too, so I can  
2 scroll through it.

3 Q. That would be great. I appreciate  
4 that. So do you have it open in front of you?

5 A. Yes.

6 Q. Okay. That's great. So a minute ago  
7 you described what the analysis that -- that you  
8 thought you were rebutting. Scrolling through  
9 maybe on pages four through eight, is that part of  
10 his report that you were rebutting?

11 A. All right. So let's look at the  
12 summary on page four. That might be the best way  
13 to do it. So Model 1 analyses which need to be  
14 surrounding the district were moved into to redrawn  
15 district. So I think -- yeah. The county in the  
16 idea is the one I was mostly responding to. I  
17 don't remember if it has any implications for the  
18 other two. Oh, so, yeah. He does it the -- the  
19 opposite way. All right. And then tried to put  
20 them together. Well, when he is trying to put them  
21 together, there was flaws with Model 1. At least  
22 presumably through Model 3.

23 Q. Okay. But Models 1, 2, and 3 are all  
24 under a Section No. 1. And you're saying that you  
25 only analyzed Section No. 1?

1           A.    Oh.  I see what you're saying.  I see  
2   what you're saying.  Yeah.  Yeah.

3           Q.    Okay.  I want to be fair to you, so  
4   there is a Section 2 that starts on page nine.  It  
5   doesn't sound like you analyzed that at all?

6           A.    No.  I -- I definitely want to go  
7   through the other two to make sure.  So this is two  
8   months ago.  So he looks out -- no.  I didn't  
9   analyze how the racial composition of districts  
10  shifted.

11          Q.    Okay.  And then if we scroll down --

12          A.    I didn't do anything with incumbent  
13  protection.

14          Q.    Okay.  So you didn't do anything with  
15  respect to Section 3.

16                Section 4 starts on page 19.  Did you  
17  do anything what that?

18          A.    Just the racial -- no.  It looks like a  
19  racial polarized voting analysis, so no.

20          Q.    Okay.  And the appendices don't look  
21  like you -- something that you considered?

22          A.    Well, I think I used -- yeah.  So  
23  that's not true.  I used them to make sure I was  
24  replicating properly.

25          Q.    Okay.  But only as to Section 1

1 District TB change?

2 A. Yeah.

3 Q. Okay. At the end of your report, on  
4 page 32, you say that "Time prohibited flooring  
5 every district in every cluster." So that is a  
6 further limitation as to your review of Section 1?

7 A. Yeah, yeah. I mean, obviously I would  
8 have loved to have gone through all of them. But I  
9 think if you don't go through all of them it's  
10 better if you can offer the reader an explanation  
11 of why you didn't, and just I didn't have time.

12 Q. Okay. So just to summarize, you only  
13 analyzed part of one analysis in Dr. Ragusa's  
14 report?

15 A. Yeah.

16 Q. Okay. On page 31, Paragraph 63, you  
17 address Dr. Ragusa's use of accounting envelope; is  
18 that right?

19 A. Right.

20 Q. You say, "A map drawer can always take  
21 the district into a new neighboring country,"  
22 correct?

23 A. Correct.

24 Q. That would create a county split  
25 though, correct?

1 A. Right.

2 Q. Okay. You're aware that the  
3 legislature had a -- a guideline seeking to reduce  
4 county splits; is that right?

5 A. No.

6 (EXHIBIT 15, House Defendants MTD, was  
7 marked for identification.)

8 BY MR. TRIVEDI:

9 Q. No. Okay. I'm going to pull up  
10 Exhibit 15. Okay. Can you see this document?

11 A. Part of it, yeah.

12 Q. Yeah. Okay. I'm scrolling back up to  
13 the top, and do you see how the middle here it  
14 says, "This is the Motion to Dismiss Plaintiff's  
15 Amended Complaint by House Defendants, James H.  
16 Lucas, Chris Murphy, and Wallace Jordan?"

17 A. Yes.

18 Q. Okay. You're aware -- as a former  
19 lawyer, do you know what a Motion to Dismiss is?

20 A. I have forgotten a lot, but I still  
21 remember the old 12(b)(6) Motion, yes.

22 Q. Okay. So this is House Defendant's  
23 attempt to get the case dismissed; is that right?

24 A. Yes. Yes.

25 Q. I'm now scrolling down to page 13.

1 Can you read the highlighted line here?

2 A. "Clearly one of the factors prioritized  
3 by the General Assembly was preserving political  
4 subdivision boundaries, such as county and precinct  
5 lines."

6 Q. So do you take the as some evidence  
7 that the General Assembly wanted to limit county  
8 splits?

9 A. Certainly. I mean -- certainly had as  
10 a goal, based on this, at least some degree of  
11 preserving political subdivision boundaries.

12 Q. Including county lines; is that right?

13 A. Well, yes.

14 Q. Okay. So when you say, "The map drawer  
15 could always take the district into a new  
16 neighboring county," that is the opposite of what  
17 the actual legislature was trying to do; is that  
18 right?

19 A. I don't think that's right. You have  
20 to cross at least some political boundaries. And,  
21 you know, you can't keep all county lines intact.  
22 And so, if the goal of legislature was to go into a  
23 different county or choose one county or another, I  
24 don't think Dr. Ragusa's analysis takes that  
25 possibility into account.

1 Q. But you concede that Dr. Ragusa limited  
2 his VTD movement analysis to VTDs within adjacent  
3 counties, and that had the effect of reducing  
4 possible county splits, correct?

5 MR. DIAMADUROS: Object to the form.

6 THE WITNESS: Yeah. You're going to  
7 have to say that again.

8 BY MR. TRIVEDI:

9 Q. Okay. You critique Dr. Ragusa's  
10 approach because you say, "The map drawer can  
11 always take the district into a new neighboring  
12 county; is that right?

13 A. Right.

14 Q. And Dr. Ragusa's analysis simply did  
15 not simply take VTDs into a new neighboring  
16 country, right?

17 A. Right.

18 Q. And I just read to you a line from the  
19 House Defendant's Motion to Dismiss saying,  
20 clearly, the General Assembly was also not trying  
21 to take VTDs into new neighboring counties,  
22 correct?

23 A. It says it's trying to preserve them,  
24 but it doesn't say anything about which forces for  
25 the county, which county would preserve county --

1 or preserve to traverse.

2 Q. But no one is forcing them to split a  
3 county; is that right?

4 A. (Inaudible).

5 MR. DIAMADUROS: Object to the form.

6 THE WITNESS: Yeah, I don't think  
7 that's right. The one person one vote rules do. I  
8 mean, I shouldn't say that. Maybe it is possible  
9 to draw this map without traversing any county  
10 lines, but I doubt it.

11 BY MR. TRIVEDI:

12 Q. Well, no one said any. The General  
13 Assembly said it was trying to preserve as many  
14 county lines as possible, correct?

15 A. Well, right. But you said no one was  
16 forcing them to cross county lines, and I don't  
17 think that's true. You have to.

18 Q. In certain circumstances, right?

19 A. Right. So you --

20 Q. But you can also have a parameter that  
21 seeks to limit county splits, right?

22 A. Certainly. Yeah. None of that is  
23 inconsistent --

24 (Simultaneous speaking)

25 Q. Some maps split more county --



1 (Simultaneous speaking)

2 A. Can I finish?

3 Q. Yeah. Sorry.

4 A. None of that is inconsistent with what  
5 I have been saying.

6 Q. Okay. But when you say, "A map drawer  
7 could always take the district into a new  
8 neighboring county," that is intention with a goal  
9 to limit county splits, correct, because if they  
10 always do it, then they wouldn't be limiting county  
11 splits, correct?

12 MR. DIAMADUROS: Object to the form.

13 THE WITNESS: There have been -- there  
14 may certain counties in South Carolina where you  
15 can put the requisite number of districts within  
16 whole counties, so that would an exception to my  
17 statement.

18 BY MR. TRIVEDI:

19 Q. Okay. You didn't --

20 A. I don't know if there are -- I don't  
21 know if there are any whole counties in this map.

22 Q. Okay. But you didn't list any county  
23 where Dr. Ragusa stayed within a county where the  
24 legislature crossed the county line, correct?

25 A. No.

1 Q. Okay. You didn't identify any counties  
2 where Dr. Ragusa's analysis unnecessarily stays  
3 within a county, correct?

4 A. That's right.

5 Q. Okay. Okay. I want to go to the final  
6 paragraph of your report where you note, "A  
7 potential issue with Dr. Ragusa's model." And tell  
8 me if I'm mischaracterizing what you say. But it  
9 seems like you're raising a potential issue with  
10 Dr. Ragusa's model because it returned  
11 statistically significant results for race for some  
12 districts where you analyzed Dr. Imai's  
13 race-neutral maps, right?

14 A. Did you say the last paragraph in my  
15 report?

16 Q. Yeah.

17 A. Okay. I must actually not have the  
18 assigned version in front of me. Can we bring it  
19 up?

20 Q. Sure. And if you give me a second, I  
21 should just point you to the language.

22 A. Well, I -- I -- I read the last  
23 paragraph in what I have up, but I don't see that  
24 language so...

25 Q. Yeah. Right now I've got a lot of tabs

1 open.

2 A. I can hear that.

3 Q. Okay. So it's the last page, the last  
4 couple of paragraphs, 66 and 67. Do you -- do you  
5 have the version?

6 A. I have 66 and 67 as the last  
7 paragraphs, yes.

8 Q. Okay. Perfect. Okay. And there, you  
9 say that you took the existing precincts in  
10 Dr. Imai's Andersen grouping and ran Dr. Ragusa's  
11 model on it; is that right?

12 A. That's right.

13 Q. And based on doing that, you saw  
14 race-based redistricting in 4,054 of the 5,000  
15 districts?

16 A. Right.

17 Q. Okay. So isn't it accurate though that  
18 Dr. Ragusa was analyzing VTD movements based on the  
19 previous enacted plan and comparing it to the newly  
20 enacted plan, right?

21 MR. DIAMADUROS: Object to the form.

22 THE WITNESS. Right. That's my  
23 understanding.

24 BY MR. TRIVEDI:

25 Q. Okay. Great. But then is it also

1 accurate that Dr. Imai was comparing the newly  
2 enacted plan to a distribution of race blind  
3 simulations?

4 A. Right. So I'm looking at this race  
5 blind simulations and seeing if you run it on that,  
6 does it suggest that there were -- that -- that  
7 race played a factor. And so, if you're turning  
8 statistically to just get results with maps that we  
9 know are drawn without respect to race, that's a  
10 pretty obvious problem.

11 Q. Right. But it's apples to oranges to  
12 use a model that was created for comparison of a  
13 previously enacted plan to a currently enacted  
14 plan, and then apply it to race blind simulations  
15 created a new; isn't that right?

16 A. No.

17 Q. Isn't it true that Dr. Imai didn't use  
18 the previously enacted map?

19 A. That's right.

20 Q. Right. And --

21 A. Well, actually, I don't know. I would  
22 have to remember whether he -- he starts from the  
23 newly enacted map with this -- with this approach.  
24 My brain is fried enough that I get all cases  
25 confused right now. But, certainly, the maps that

1 he produced are not the previously enacted maps.

2 Q. Okay. So if you're -- if -- does it  
3 stand to reason that if you're comparing a  
4 previously enacted plan to Dr. Imai's race blind  
5 simulation, that a district would present as race  
6 based if the previously enacted plan was race based  
7 because all of the simulations are race blind,  
8 correct?

9 A. All simulations --

10 MR. DIAMADUROS: Object to the form.

11 THE WITNESS: Sorry. As far as I know,  
12 all the simulations are race blind.

13 BY MR. TRIVEDI:

14 Q. Right. And so if you compare -- if you  
15 compare a race blind simulation to a previously  
16 enacted map that was race based, virtually all of  
17 them are going to present as race based because the  
18 simulation was race blind, right?

19 A. No. Because if Dr. Imai's maps are the  
20 enacted maps, you're going to -- it should -- it  
21 should just be random. You shouldn't have  
22 80 percent of the maps showing statistically  
23 significant results, and other -- and other ones  
24 not. I'm sorry. I'm not following this line of  
25 questions.

1 Q. Well, let's say, is it -- isn't it  
2 possible than when you ran Dr. Ragusa's model, on  
3 Dr. Imai's race blind simulations in a handful of  
4 districts, that the statistically significant  
5 results could have simply picked up VTD movements  
6 from a previous raced based map to a new race blind  
7 map?

8 A. Yeah, I suppose it's possible.

9 Q. Okay. Okay. Last thing. In terms of  
10 your report, you say at page 30, Paragraph 62, that  
11 the districts here were definitely drawn  
12 purposefully with respect to race in some areas; is  
13 that right?

14 A. Yes.

15 Q. I think you say that a couple of times  
16 in the report; is that right?

17 A. Yes.

18 Q. And then you say, "The VRA requires  
19 this;" is that right?

20 A. Yes.

21 Q. So you're not putting yourself forward  
22 as an expert in the VRA in this case; is that  
23 right?

24 A. I have no idea what I'm going to be put  
25 forward as an expert in.

1 Q. Well, we can go back to the top of your  
2 report. Do you list the VRA as something that you  
3 are an expert in?

4 A. I don't know if I list anything as my  
5 particular expertise, but I served as the voting  
6 rights expert for counsel from the Arizona  
7 Independent Redistricting Commission, so someone  
8 thinks I'm an expert in the VRA.

9 Q. Do you consider yourself an expert in  
10 the VRA?

11 A. I teach it. So, yes.

12 Q. Okay. Are you offering an opinion in  
13 this case on the VRA?

14 A. No.

15 Q. Okay. Are you offering an opinion on  
16 the VRA even in this paragraph that we're talking  
17 about?

18 A. I have it. So if we want to back out,  
19 I haven't done a particular racial polarized voting  
20 analysis, so I understand your experts have, which  
21 would seem to suggest that you do need to use race  
22 to some degree, but, you know --

23 Q. Well, have you done -- go ahead.

24 A. I haven't done -- I haven't done my own  
25 racially polarized voting analysis, no.

1 Q. Have you done any analysis with respect  
2 to the VRA in your report?

3 A. No.

4 Q. Have you identified any districts that  
5 were, quote unquote, "Drawn purposely with respect  
6 to race" in order to comply with the VRA?

7 A. No.

8 Q. Have you identified any districts whose  
9 changes were required by the VRA?

10 A. No, I haven't looked at that.

11 Q. So you say the VRA requires this, but  
12 you have been identified a single district where  
13 that's the case?

14 A. That's right.

15 Q. Okay. Do you have a list of districts  
16 say that were out of compliance with the VRA, and  
17 then required certain VTD movements to come into  
18 compliance with the VRA?

19 A. No.

20 Q. Conversely, do you have a list of  
21 districts that were already VRA compliant that  
22 didn't need any race-conscious line drawings to  
23 become compliant?

24 A. No.

25 Q. Do you have any statistical evidence



1 for whether a particular district in the enacted  
2 plan were drawn with a BVAP level to comply with  
3 the VRA?

4 A. No.

5 Q. So, for example, a district can add  
6 BVAP to become compliant with the VRA; is that  
7 right?

8 A. That's right.

9 Q. But if it has too much BVAP, it is then  
10 passed and falls out of compliance with the VRA and  
11 becomes illegal; is that right?

12 A. I don't -- I think that's in  
13 contention.

14 Q. Okay. Is it a --

15 (Simultaneous speaking)

16 Q. Sorry. Can I just finish asking my  
17 question?

18 A. Yeah. Yeah. I'm just trying to --

19 Q. Can a district have a BVAP that is so  
20 high to be noncompliant with the VRA?

21 A. I think you have to -- so, I don't  
22 think it can inherent that -- can typically  
23 inherently happen. It depends on the other  
24 evidence being produced in the case, right? Like  
25 if you look at the places like Arizona -- Alabama

1 democratic party, you know, they had set firm  
2 baseline of 70 percent, and there was no evidence  
3 that you needed a base line that high. But I don't  
4 think if you just were drawing districts without  
5 respect to race, and you ended up with a district  
6 that was, you know, 70 percent BVAP, I don't think  
7 that would get you into sure trouble, but I'm not  
8 sure.

9 Q. Okay. But you haven't done that  
10 analysis in this case?

11 A. I have not, no.

12 Q. Not with respect to any district?

13 A. That's right.

14 Q. Okay. You had access to all the same  
15 census data that everyone else in this case did,  
16 correct?

17 A. That's right.

18 Q. That would include BVAP data?

19 A. Yes.

20 Q. And prior elections data?

21 A. That's right.

22 Q. And you had all -- you had access to  
23 all the same programs that Dr. Ragusa used?

24 A. Sure.

25 Q. And that Dr. Imai used?

1 A. Yes.

2 Q. And you didn't conduct a single  
3 analysis about whether certain districts were,  
4 quote unquote, "Definitely drawn purposely with  
5 respect to race in some areas," correct?

6 A. No. I wasn't asked to do that so of  
7 course I didn't.

8 Q. But you said it. You said, "There were  
9 districts that were definitely drawn purposely with  
10 respect to race in some areas," correct?

11 A. Yes.

12 Q. But you didn't identify any of those  
13 districts?

14 A. No.

15 Q. And you said the VRA requires this,  
16 right?

17 A. Correct.

18 Q. But you didn't explain how?

19 A. That's right.

20 Q. Okay. I think we can be done here with  
21 affirmative questions. That said -- and this is  
22 not a question posed to you Mr. Trende, but  
23 something I'm putting on the record.

24 A. Understood.

25 MR. TRIVEDI: Given the copious

1 information that we have discussed today that  
2 wasn't turned over, or wasn't turned over on a  
3 timely manner, including things that Mr. Trende has  
4 admitted that he e-mailed over to counsel during  
5 this deposition, Plaintiffs are going to have to  
6 keep this open to address all of that material that  
7 we weren't given adequate time to review.

8 MR. DIAMADUROS: Just to put on the  
9 record, House Defendant's position, Plaintiff's  
10 Counsel knew when this information was going to be  
11 coming. So we are not going to agree to leave this  
12 open, but again, that is just to put our position  
13 on the record as well. And we would like to take a  
14 quick five-minute break before we proceed with our  
15 questioning.

16 MR. TRIVEDI: Okay.

17 THE VIDEOGRAPHER: The time on the  
18 monitor is 1:22 p.m. We're going off the record.

19 (Discussion off the record.)

20 (A brief recess was taken.)

21 THE VIDEOGRAPHER: The time on the  
22 monitor is 1:31 p.m. and we're back on record.

23 MR. DIAMADUROS: All right. Thank you,  
24 Mr. Trende. We appreciate you being here today,  
25 and just before I ask you a couple of brief

1 questions, I just want to add to a couple of points  
2 to what we said before we went off the record.

3 We just want to put on the record that  
4 last week we did tell Plaintiff's Counsel that  
5 Mr. Trende was going to be out of the country, and  
6 we told him that he would be back Monday, and he  
7 would get that many materials shortly after his  
8 return. We told him last week that to the extent  
9 they needed any other materials from him that we  
10 needed that request as soon as possible last week.  
11 We had not receive the request for the metadata  
12 related to his dissertation until late yesterday.  
13 And we also told Plaintiff's Counsel that with  
14 respect to the issue with Mr. Trende's son that was  
15 not a hard stop, it was just something that we  
16 needed to work around. So based on -- on those  
17 representations, we're -- we're not going to agree  
18 to leave this open, but, again, just wanted to put  
19 that on the record.

20 EXAMINATION

21 BY MR. DIAMADUROS:

22 Q. So Mr. Trende, do you know whether --

23 MR. TRIVEDI: So Mr. Diamaduros, I  
24 don't want to go back and forth too much. I just  
25 want to acknowledge the point about Mr. Trende's

1 son. If that was the misunderstanding, I'm glad  
2 that we're going to finish on time so that he can  
3 get to that, that's fine.

4 As to the other requests, I disagree  
5 with the factual recitation, and I would note that  
6 Defendant's Counsel and the expert have obligations  
7 to turn stuff over whether we have made a request  
8 or not. Okay. So let's move forward.

9 MR. DIAMADUROS: Fair enough. Just  
10 wanted to put that position on the record. So  
11 thank for that.

12 BY MR. DIAMADUROS:

13 Q. So Mr. Trende, do you have any  
14 knowledge whether any of the Plaintiff's experts in  
15 this case have dissertations of their own?

16 A. I would assume.

17 Q. Okay. And do you know what any of  
18 those everything dissertations would be about, what  
19 topics they're on?

20 A. No clue.

21 Q. Okay. Mr. Trende, I know that you --  
22 you were and are still a lawyer, so you're probably  
23 familiar with the Federal Rules of Civil Procedure  
24 generally, but I'm -- I'm going to just briefly  
25 read to you Federal Rule of Civil Procedure

1 26(a)(2)(B)(5), and that's with respect to an item  
2 that you would be required to disclose in an expert  
3 report.

4 So again, just because I'm not a -- I  
5 don't think I have the ability to share my screen  
6 on this -- on this deposition right now, I'm just  
7 going to read it into the record. So that rule  
8 says, "Unless otherwise stipulated or ordered by  
9 the Court, this disclosure, an expert disclosure,  
10 must be accompanied by a written report prepared  
11 and signed by the witness, if the witness is, one,  
12 retained or especially employed to provide expert  
13 testimony in the case, or one whose duties as the  
14 party's employee regularly involve giving expert  
15 testimony. The report must contain" -- Again, this  
16 is Item 5, "A list of all other cases in which  
17 during the previous four years the witness  
18 testified as an expert at trial or by deposition."

19 MR. TRIVEDI: Object to the form.  
20 Calls for a legal conclusion.

21 BY MR. DIAMADUROS:

22 Q. Based on my reading of that rule,  
23 Mr. Trende, did you intentionally omit any cases  
24 that fall within that subsection of Rule 22?

25 A. No.

1 Q. Okay. And when you were drafting your  
2 expert opinions, Mr. Trende, is it your practice to  
3 do what counsel instructs you to do?

4 A. Generally, yes. Unless I think it's  
5 something that I can't do.

6 Q. And just to clarify, with respect to  
7 the scope of the opinions that you -- that you  
8 create for cases, it's -- it's your practice to  
9 keep a scope of those opinions within the scope  
10 that counsel specifically requests you to do,  
11 right?

12 A. Yes. As I said, it's not my job to win  
13 the case for you.

14 Q. Okay. That's exactly what you did in  
15 this case, right?

16 A. That's right.

17 Q. And you're unaware of -- with respect  
18 to disclosing your expert testimony or previous  
19 expert testimony, you're not aware of any rule that  
20 would require you to disclose how much weight a  
21 Court may have given your prior testimony, right?

22 A. No.

23 MR. TRIVEDI: Objection. Calls for  
24 legal conclusion.

25 MR. DIAMADUROS: No further questions



1 from us.

2 THE VIDEOGRAPHER: If that's it, I'll  
3 get us off the record. All right. The time on my  
4 monitor is 1:36 p.m. This concludes the  
5 deposition.

6 THE COURT REPORTER: I will need to  
7 know about read and sign, please.

8 MR. DIAMADUROS: I'm sorry. I spoke  
9 over you just then, Julie.

10 THE COURT REPORTER: Oh, I'm sorry.  
11 I'm asking about the witness reading and signing  
12 the deposition or waiving?

13 MR. DIAMADUROS: Yeah, we would like to  
14 read and sign.

15 THE WITNESS: All right. I'll read and  
16 sign.

17 THE COURT REPORTER: Okay. And can I  
18 send it through you?

19 MR. DIAMADUROS: Yes.

20 THE COURT REPORTER: Sorry. Okay.

21 And then if you all can let me know who  
22 needs a copy, and who -- what you would like? If  
23 E-transcript is okay.

24 MR. DIAMADUROS: Yes. You can just  
25 send a copy of the transcript to me for the House

1 Defendants and we would like a rough as well.

2 THE COURT REPORTER: Okay.

3 MR. TRIVEDI: Same with Plaintiffs, and  
4 if there is an expedited rough, could you let us  
5 know? Maybe we'll -- we'll e-mail you about costs?

6 THE COURT REPORTER: Yes. I will do  
7 that. Sure.

8 MR. TRIVEDI: Thank you.

9 MS. TRINKLEY: This is Jane Trinkley  
10 for the Election Defendants, I do not need a copy.

11 THE COURT REPORTER: Okay. Thank you.

12 MR. KENNY: This is Stephen Kenny for  
13 the Senate Defendants, we would like a copy. We  
14 don't need a rough or a rough transcript. Just  
15 standard.

16 THE COURT REPORTER: Okay. Thank you.

17 (The witness, after having been advised  
18 of his right to read and sign this transcript, does  
19 not waive that right.)

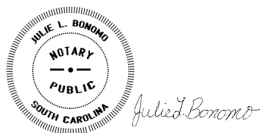
20 (The deposition concluded at 1:38 p.m.)  
21  
22  
23  
24  
25

CERTIFICATE OF REPORTER

I, Julie L. Bonomo, Court Reporter and Notary Public for the State of South Carolina at Large, do hereby certify that the foregoing transcript is a true, accurate, and complete record.

I further certify that I am neither related to nor counsel for any party to the cause pending or interested in the events thereof.

Witness my hand, I have hereunto affixed my official seal this 18th day of April, 2022, at Charleston, Charleston County, South Carolina.



Julie L. Bonomo

Court Reporter

My Commission expires

July 28, 2027

I N D E X

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

	Page	Line
SEAN TRENDE	5	15
EXAMINATION	5	17
BY MR. TRIVEDI		
EXAMINATION	172	20
BY MR. DIAMADUROS		
CERTIFICATE OF REPORTER	178	1

REQUESTED INFORMATION INDEX

(No Information Requested)

E X H I B I T S

	Page	Line
EXHIBIT 1, Amended Deposition	12	4
Notice		
EXHIBIT 2, Trende Report and	13	13
CV		
EXHIBIT 16, Trende	34	25
Dissertation 2		
Exhibit 17, Trende	38	7
Dissertation 1		
EXHIBIT 18, Ohio Organizing	38	9
Collaborative v. Husted, 2		

1	EXHIBIT 10, Trende New York	57	25
2	Report		
3	EXHIBIT 11, Common Cause v.	58	2
4	Rucho		
5	EXHIBIT 12, New York REDIST	58	4
6	Opinion		
7	EXHIBIT 3, NAACP vs. McCrory	64	22
8	EXHIBIT 4, Ohio Organizing	70	6
9	Collaborative v. Husted		
10	EXHIBIT 5, WHITFORD v. GILL	73	25
11	EXHIBIT 6, Fair Fight Action	77	2
12	v. Raffensperger		
13	EXHIBIT 7, League of Women	77	4
14	Voters of Ohio v. Ohio		
15	Redistricting Commission		
16	EXHIBIT 8, Democratic National	90	16
17	Committee versus Reagan		
18	EXHIBIT 9, Report of	94	25
19	Dr. Kosuke Imai		
20	EXHIBIT 13, Ragusa Report	152	3
21	EXHIBIT 14, NAACP House	152	5
22	Submission		
23	EXHIBIT 15, House Defendants	156	6
24	MTD		
25			

1 KONSTANTINE DIAMADUROS

2 kdiamaduros@nexsenpruet.com

3 April 19, 2022

4 RE: The South Carolina State Conference Of The NAACP v.  
Alexander, Thomas C

5 4/5/2022, Sean Trende (#5166711)

6 The above-referenced transcript is available for  
7 review.

8 Within the applicable timeframe, the witness should  
9 read the testimony to verify its accuracy. If there are  
10 any changes, the witness should note those with the  
11 reason, on the attached Errata Sheet.

12 The witness should sign the Acknowledgment of  
13 Deponent and Errata and return to the deposing attorney.  
14 Copies should be sent to all counsel, and to Veritext at  
15 erratas-cs@veritext.com.

16  
17 Return completed errata within 30 days from  
18 receipt of testimony.

19 If the witness fails to do so within the time  
20 allotted, the transcript may be used as if signed.

21  
22 Yours,  
23 Veritext Legal Solutions  
24  
25

1 The South Carolina State Conference Of The NAACP v. Alexander,  
Thomas C

2 Sean Trende (#5166711)

3 E R R A T A S H E E T

4 PAGE \_\_\_\_\_ LINE \_\_\_\_\_ CHANGE \_\_\_\_\_

5 \_\_\_\_\_

6 REASON \_\_\_\_\_

7 PAGE \_\_\_\_\_ LINE \_\_\_\_\_ CHANGE \_\_\_\_\_

8 \_\_\_\_\_

9 REASON \_\_\_\_\_

10 PAGE \_\_\_\_\_ LINE \_\_\_\_\_ CHANGE \_\_\_\_\_

11 \_\_\_\_\_

12 REASON \_\_\_\_\_

13 PAGE \_\_\_\_\_ LINE \_\_\_\_\_ CHANGE \_\_\_\_\_

14 \_\_\_\_\_

15 REASON \_\_\_\_\_

16 PAGE \_\_\_\_\_ LINE \_\_\_\_\_ CHANGE \_\_\_\_\_

17 \_\_\_\_\_

18 REASON \_\_\_\_\_

19 PAGE \_\_\_\_\_ LINE \_\_\_\_\_ CHANGE \_\_\_\_\_

20 \_\_\_\_\_

21 REASON \_\_\_\_\_

22 \_\_\_\_\_

23 \_\_\_\_\_

24 Sean Trende Date

25

The South Carolina State Conference Of The NAACP v. Alexander,  
Thomas C

Sean Trende (#5166711)

ACKNOWLEDGEMENT OF DEPONENT

I, Sean Trende, do hereby declare that I  
have read the foregoing transcript, I have made any  
corrections, additions, or changes I deemed necessary as  
noted above to be appended hereto, and that the same is  
a true, correct and complete transcript of the testimony  
given by me.

\_\_\_\_\_  
Sean Trende

\_\_\_\_\_  
Date

\*If notary is required

SUBSCRIBED AND SWORN TO BEFORE ME THIS

\_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
NOTARY PUBLIC



[& - 51]

Page 1

<b>&amp;</b>	<b>13cv658</b> 65:10	<b>20</b> 10:6 45:22	<b>30</b> 45:22 121:21
<b>&amp;</b> 3:14	<b>14</b> 65:8 110:22	121:5 137:9 179:8	165:10 181:17
<b>0</b>	142:14 152:5	183:15	<b>31</b> 155:16
<b>03302</b> 1:6	180:21	<b>200</b> 66:16	<b>32</b> 155:4
<b>1</b>	<b>1494</b> 114:3,5	<b>20001</b> 3:11	<b>34</b> 179:20
<b>1</b> 12:4 36:9 38:7	117:16,18	<b>20005</b> 2:6,21	<b>37</b> 118:7
152:22,23 153:13	<b>14th</b> 2:20 59:4,15	<b>2016</b> 46:7	<b>38</b> 125:4 179:22
153:21,23,24,25	<b>15</b> 10:6 20:1,14,21	<b>202-682-1300</b> 2:21	179:24
154:25 155:6	57:5 117:17 156:6	<b>202-715-0802</b> 2:7	<b>3:21</b> 1:6
179:10,16,23	156:10 179:5	<b>202-879-3667</b> 3:11	<b>4</b>
<b>10</b> 14:16 57:25	180:23	<b>2021</b> 11:15 14:23	<b>4</b> 70:6 114:3
129:12 180:1	<b>152</b> 180:20,21	14:24 59:5	154:16 179:16
<b>100</b> 124:11	<b>156</b> 180:23	<b>2022</b> 1:13 4:4	180:5,8,13
<b>10004</b> 2:12	<b>15th</b> 2:6 82:16	14:16,21,25 23:23	<b>4,000</b> 135:19
<b>10006</b> 2:16	<b>16</b> 34:25 179:20	29:5 59:6,15	<b>4,054</b> 162:14
<b>104</b> 3:2	180:16	178:13 181:3	<b>4.14</b> 137:24
<b>10:06</b> 1:14	<b>1633</b> 117:15,17	<b>2027</b> 178:25	<b>4.53</b> 140:14
<b>10th</b> 59:19 60:1	<b>17</b> 38:7,13 117:18	<b>21</b> 127:1	<b>4/5/2022</b> 181:5
80:17,20 81:4,4	142:18 179:6,22	<b>212-284-7334</b> 2:12	<b>40</b> 2:16 120:23
81:24	<b>172</b> 179:8	<b>21875</b> 178:23	<b>41</b> 120:22
<b>11</b> 36:8 58:2 85:10	<b>178</b> 179:10	<b>22</b> 174:24 180:7	<b>43</b> 16:6 121:19
86:25 87:4,12	<b>18</b> 38:9 115:9	<b>24</b> 36:15,15 133:4	<b>43015</b> 25:25
117:14 180:3	179:24	133:6,8 134:6	<b>44</b> 72:20,24
<b>112</b> 69:13,15	<b>1800</b> 3:16	<b>24th</b> 95:15,20	<b>4493</b> 11:9
<b>1146</b> 1:15 25:24	<b>18th</b> 178:12	<b>25</b> 46:2 133:8	<b>45</b> 24:17
<b>11:24</b> 94:6	<b>19</b> 74:9 123:9	138:2,4,12 179:20	<b>5</b>
<b>12</b> 34:21 58:4	125:4 154:16	180:1,10,18	<b>5</b> 1:13 4:3 73:25
109:18 117:15	181:3	<b>26</b> 138:14 174:1	174:1,16 179:5,6
156:21 179:16	<b>1973</b> 25:22	<b>27</b> 140:6	180:10,21
180:5	<b>1:22</b> 171:18	<b>28</b> 106:9 140:18	<b>5,000</b> 98:10,11,20
<b>1221</b> 3:16	<b>1:31</b> 171:22	178:25	98:24 102:7,11
<b>1234</b> 105:1	<b>1:36</b> 176:4	<b>29</b> 152:10	112:6 114:16
<b>125</b> 2:11	<b>1:38</b> 177:20	<b>29201</b> 3:17	115:16 134:23
<b>12:09</b> 126:21	<b>1st</b> 82:16	<b>29601</b> 3:3	135:18,25 137:10
<b>12:41</b> 151:16	<b>2</b>	<b>3</b>	150:19 151:6
<b>12:58</b> 151:19	<b>2</b> 13:13 34:25	<b>3</b> 64:22 153:22,23	162:14
<b>13</b> 152:3 156:25	37:19 38:10 114:2	154:15 180:7,20	<b>5.72</b> 141:13
179:18,18 180:20	114:4 153:23	<b>3,500</b> 134:23	<b>50</b> 121:9 129:11
<b>1393</b> 114:3,5	154:4 174:1	135:19 136:11	<b>51</b> 3:10 68:20
	179:18,21,25	<b>3.84</b> 140:2	
	180:3,11		

[5166711 - agreement]

Page 2

<b>5166711</b> 181:5 182:2 183:2 <b>52</b> 138:16 <b>5678</b> 105:1 <b>57</b> 180:1 <b>58</b> 180:3,5 <b>5th</b> 2:16	<b>8</b> <b>8</b> 90:16 114:6 180:16 <b>80</b> 164:22 <b>803-799-9800</b> 3:17 <b>85</b> 69:11 121:20 <b>864-370-2211</b> 3:4	28:14,17 71:25 89:17 157:25 <b>accounted</b> 128:1,3 129:17 <b>accounting</b> 155:17 <b>accounts</b> 26:1 28:5,7,22 <b>accuracy</b> 181:9 <b>accurate</b> 70:23 162:17 163:1 178:6 <b>acepedaderieux</b> 2:13 <b>acknowledge</b> 172:25 <b>acknowledgement</b> 183:3 <b>acknowledging</b> 96:10 <b>acknowledgment</b> 181:12 <b>aclu</b> 5:10 <b>aclu.org</b> 2:7,13 <b>acly.org</b> 2:8 <b>act</b> 65:17 67:22 68:5,8,10,15,17 68:23 69:4,7 <b>action</b> 77:2,9 79:10 80:10 180:11 <b>actions</b> 80:22 <b>actual</b> 15:17 72:4 124:7 130:13 157:17 <b>add</b> 9:18 168:5 172:1 <b>additional</b> 9:16 <b>additions</b> 183:6 <b>address</b> 9:19 25:23 116:22 155:17 171:6	<b>addresses</b> 26:8 <b>adequate</b> 171:7 <b>adjacent</b> 121:6 158:2 <b>administration</b> 77:21 <b>administrator</b> 78:12 <b>admit</b> 70:14 77:13 111:10 132:16 <b>admitted</b> 65:15 71:16,20 171:4 <b>adopted</b> 82:15,24 85:11 <b>adriel</b> 2:9 5:6 <b>advice</b> 147:19 <b>advised</b> 177:17 <b>affect</b> 68:22 <b>affirmative</b> 88:12 88:21 170:21 <b>affixed</b> 178:12 <b>ago</b> 7:20 12:25 18:22,23,25 19:1 20:18 21:6 29:1 71:4,6 108:5 126:8 137:16 145:20 153:6 154:8 <b>agree</b> 37:2,3 59:13 67:6 96:24 97:10 102:15 106:13 108:1 113:4 118:8 119:21 120:23 121:8 135:6 137:12 150:22 152:24 171:11 172:17 <b>agreed</b> 19:18 37:9 64:3 92:9 <b>agreement</b> 120:4
<b>6</b>	<b>9</b> <b>9</b> 94:25 95:4 179:24 180:18 <b>90</b> 121:7 180:16 <b>900</b> 3:3 <b>910</b> 105:2 <b>915</b> 2:6 <b>917-858-2870</b> 2:17 <b>94</b> 180:18 <b>99</b> 139:23 <b>9:05</b> 4:2 <b>9th</b> 124:10,13	<b>a</b> <b>a.m.</b> 1:14 4:2 38:1 94:3,6 <b>ability</b> 174:5 <b>able</b> 6:20 40:22 66:24 105:18 117:8 131:19 <b>academic</b> 46:9,13 46:18 <b>accept</b> 67:10 <b>accepted</b> 97:1 <b>access</b> 42:2,7 43:5 43:8 120:6 169:14 169:22 <b>accident</b> 129:21 <b>accompanied</b> 174:10 <b>accorded</b> 72:6 76:23 <b>account</b> 27:1,2,3,4 27:9,11,12 28:8	
<b>6</b> 25:22 77:2 114:6 156:21 180:8,11 180:23 <b>60</b> 120:12,21 <b>600</b> 2:20 65:23 66:16 <b>62</b> 165:10 <b>63</b> 66:14 155:16 <b>64</b> 180:7 <b>66</b> 162:4,6 <b>67</b> 162:4,6 <b>6a</b> 85:10 86:25 87:4	<b>7</b>	<b>7</b> 77:4 179:22 180:13 <b>7.49</b> 116:5 <b>7.5</b> 115:25 116:3,4 116:6 135:15 142:17 <b>7.51</b> 116:5 <b>70</b> 120:12,14,21 120:24 121:2 169:2,6 180:8 <b>700</b> 2:20 <b>71</b> 66:18 68:20 <b>73</b> 180:10 <b>77</b> 180:11,13 <b>7:40</b> 38:1	

[agrees - assume]

Page 3

<p><b>agrees</b> 150:25</p> <p><b>ahead</b> 9:9 22:16 83:23 166:23</p> <p><b>aingram</b> 2:22</p> <p><b>al</b> 1:4,7 2:2 4:6,7</p> <p><b>alabama</b> 92:13,23 93:14 168:25</p> <p><b>alexander</b> 1:7 3:6 4:7,24 181:4 182:1 183:1</p> <p><b>algorithm</b> 109:20</p> <p><b>alleges</b> 10:14</p> <p><b>allotted</b> 181:20</p> <p><b>allow</b> 103:3</p> <p><b>allowed</b> 67:5 68:4</p> <p><b>allowing</b> 65:13</p> <p><b>almanac</b> 148:22</p> <p><b>alright</b> 9:25</p> <p><b>alternative</b> 87:7 87:19</p> <p><b>amathias</b> 3:5</p> <p><b>amended</b> 12:4 156:15 179:16</p> <p><b>american</b> 2:3,9 4:14 5:1,7 148:22</p> <p><b>amount</b> 83:8</p> <p><b>analogy</b> 115:19,22</p> <p><b>analyses</b> 48:24 130:1 152:12 153:13</p> <p><b>analysis</b> 47:17,19 47:21 48:15 49:22 56:17 68:1 73:21 83:9 85:13 86:3,6 92:4,6 93:10 97:11 98:10,13 107:12 114:22 116:21 130:18,20 130:21 131:23 144:16 152:19,23 153:7 154:19</p>	<p>155:13 157:24 158:2,14 161:2 166:20,25 167:1 169:10 170:3</p> <p><b>analyze</b> 152:13 154:9</p> <p><b>analyzed</b> 105:14 130:11 132:2 153:25 154:5 155:13 161:12</p> <p><b>analyzing</b> 162:18</p> <p><b>andersen</b> 116:18 116:22,25 133:9 133:15 134:2,5 138:3,12 162:10</p> <p><b>anderson</b> 134:1</p> <p><b>andrew</b> 3:1 4:19 24:3</p> <p><b>annoyed</b> 90:11</p> <p><b>answer</b> 6:17 7:9 9:7,9,15,18 10:2 17:11 23:11,13 52:12 54:21 84:16 84:17 93:6 96:22 100:23 102:22 111:19 139:8</p> <p><b>answered</b> 84:12 147:11</p> <p><b>answering</b> 6:4 7:2</p> <p><b>answers</b> 6:11 51:9 147:20</p> <p><b>antonio</b> 2:19</p> <p><b>anymore</b> 28:11 79:13</p> <p><b>apart</b> 60:16</p> <p><b>apologize</b> 38:13 95:23</p> <p><b>apparently</b> 83:19</p> <p><b>appear</b> 47:11 104:4 105:17 106:18 107:3,6,8</p>	<p>107:10,15 108:2 108:20 141:25</p> <p><b>appearance</b> 118:8</p> <p><b>appearances</b> 2:1</p> <p><b>appeared</b> 83:11 109:14</p> <p><b>appears</b> 69:20 121:20</p> <p><b>appended</b> 183:7</p> <p><b>appendices</b> 154:20</p> <p><b>apples</b> 163:11</p> <p><b>applicable</b> 181:8</p> <p><b>application</b> 29:24 29:25 36:9 37:19 39:22 44:15 70:22</p> <p><b>applications</b> 30:9 32:23</p> <p><b>applied</b> 11:17 97:3</p> <p><b>apply</b> 163:14</p> <p><b>appreciate</b> 94:23 139:13 153:3 171:24</p> <p><b>approach</b> 115:11 119:3 127:15 132:13 152:18 158:10 163:23</p> <p><b>approved</b> 29:25</p> <p><b>approximately</b> 10:5 20:3 24:6</p> <p><b>approximations</b> 35:12</p> <p><b>april</b> 1:13 4:3 29:21 178:12 181:3</p> <p><b>area</b> 34:11</p> <p><b>areas</b> 75:15 78:7 165:12 170:5,10</p> <p><b>arguing</b> 67:22</p> <p><b>argument</b> 67:21 75:13 84:19</p>	<p><b>arizona</b> 90:25 92:12,21 93:15 166:6 168:25</p> <p><b>arizona's</b> 92:4</p> <p><b>article</b> 16:7,8 30:11 32:12 34:1 34:3 36:16 41:16 44:14 45:9 46:10 46:13 78:15,21 82:22,24 85:10 86:2,25 87:4,11 127:6</p> <p><b>articles</b> 15:15 30:25 41:14 47:13 47:16,22,25 48:4 50:14 78:5,25</p> <p><b>aside</b> 24:10</p> <p><b>asked</b> 10:25 41:24 52:6 78:15 89:2 93:6 95:13 96:3,6 170:6</p> <p><b>asking</b> 6:10 7:10 33:25 84:4 122:15 133:24 168:16 176:11</p> <p><b>assembly</b> 157:3,7 158:20 159:13</p> <p><b>assert</b> 98:9 114:11</p> <p><b>assertion</b> 58:12 123:15 124:21</p> <p><b>assessment</b> 124:24</p> <p><b>assigned</b> 161:18</p> <p><b>assimilation</b> 106:14</p> <p><b>assist</b> 96:15</p> <p><b>assume</b> 25:16 34:9 34:10 43:18 71:7 76:17 91:21 97:5 110:7 134:14 135:14 173:16</p>
--	---	---	--

[assumed - bvap]

Page 4

<p><b>assumed</b> 51:10</p> <p><b>assuming</b> 33:24 53:23 54:15 83:10 126:4 129:16</p> <p><b>assumption</b> 97:7 102:10</p> <p><b>assumptions</b> 54:7</p> <p><b>attached</b> 181:11</p> <p><b>attempt</b> 156:23</p> <p><b>attempted</b> 85:10 85:14 113:4</p> <p><b>attending</b> 1:12,18 2:4,5,10,11,15 3:1 3:2,9,10,15</p> <p><b>attorney</b> 8:18,25 23:20 24:4 181:13</p> <p><b>attorneys</b> 2:1,23 3:6,13 9:4,7 17:22 18:17 19:20 22:8 23:1 27:7 93:25</p> <p><b>audio</b> 7:15 31:7</p> <p><b>authored</b> 65:9 74:9 78:14,20 79:8</p> <p><b>authors</b> 36:17</p> <p><b>available</b> 16:9 17:8 181:6</p> <p><b>avenue</b> 3:10</p> <p><b>average</b> 103:13 122:14 142:16</p> <p><b>avoiding</b> 143:1,17</p> <p><b>aware</b> 41:24 61:6 64:18 65:19 66:3 88:19 116:17 148:23 156:2,18 175:19</p> <p><b>axis</b> 111:14,17,21 112:1,4,7 128:20 128:22,23 129:1,2 129:11 134:22</p>	<p><b>b</b></p> <p><b>b</b> 25:24 156:21 174:1 179:14</p> <p><b>babies</b> 115:20,24 116:1,3,4</p> <p><b>back</b> 8:4 9:8 16:18 16:20,20 27:6 39:16 44:3,13 55:6 68:21 79:20 86:4 94:6,9 95:24 96:13 97:5 105:2 105:7 108:4 118:6 120:20 126:21,23 144:4 145:16 151:12,19,21 156:12 166:1,18 171:22 172:6,24</p> <p><b>background</b> 7:22 15:15 25:18 28:25 116:9</p> <p><b>bailing</b> 81:12</p> <p><b>ballot</b> 37:19 91:3</p> <p><b>ballots</b> 65:14 69:20</p> <p><b>bangia</b> 127:5</p> <p><b>baodong</b> 21:16</p> <p><b>barber</b> 52:6 82:10 82:14</p> <p><b>bars</b> 135:15 136:23</p> <p><b>base</b> 169:3</p> <p><b>based</b> 57:23 74:11 95:5 126:7 134:22 157:10 162:13,14 162:18 164:6,6,16 164:17 165:6 172:16 174:22</p> <p><b>baseline</b> 169:2</p> <p><b>basic</b> 52:9</p> <p><b>basing</b> 124:15</p>	<p><b>bayesian</b> 35:12</p> <p><b>beam</b> 127:23 128:11</p> <p><b>beginning</b> 102:12</p> <p><b>behalf</b> 4:17,20,21 4:23 5:3</p> <p><b>believe</b> 15:25 16:17 25:5 26:23 28:15 75:6 90:7 106:25 107:4 108:17 115:10 130:17 146:25 148:20 150:13</p> <p><b>believed</b> 70:20</p> <p><b>best</b> 7:8 153:12</p> <p><b>better</b> 149:16 155:10</p> <p><b>beyond</b> 99:21</p> <p><b>bias</b> 30:12 32:13 45:12 87:7,20,21 151:2,7</p> <p><b>big</b> 56:19 83:24 91:9,11 123:7</p> <p><b>bill</b> 11:9,9</p> <p><b>birth</b> 25:21</p> <p><b>bit</b> 30:16 61:11 132:15</p> <p><b>bizarre</b> 90:8</p> <p><b>blank</b> 124:13</p> <p><b>blind</b> 134:12 163:2,5,14 164:4 164:7,12,15,18 165:3,6</p> <p><b>blog</b> 47:6</p> <p><b>boards</b> 51:19</p> <p><b>body</b> 130:23</p> <p><b>bold</b> 12:15 13:19</p> <p><b>bonomo</b> 1:17 178:3,23</p> <p><b>borrow</b> 75:19</p>	<p><b>bottom</b> 59:19 66:23 85:7,17 106:8 138:4</p> <p><b>boundaries</b> 157:4 157:11,20</p> <p><b>brain</b> 163:24</p> <p><b>break</b> 8:16,20 64:6 93:23 94:14 94:19 106:5 126:24 151:10,24 171:14</p> <p><b>breakdowns</b> 118:16,23 120:3,5 120:7</p> <p><b>breaks</b> 8:24</p> <p><b>brief</b> 94:4 126:19 151:17 171:20,25</p> <p><b>briefly</b> 173:24</p> <p><b>briefs</b> 46:3</p> <p><b>bring</b> 35:21 161:18</p> <p><b>brnovich</b> 91:5</p> <p><b>broad</b> 2:11 132:15</p> <p><b>broadly</b> 10:14 132:16</p> <p><b>brought</b> 10:22 67:24 73:9</p> <p><b>build</b> 145:2,17</p> <p><b>built</b> 145:4</p> <p><b>bulk</b> 139:3,6</p> <p><b>bunch</b> 122:23</p> <p><b>burden</b> 56:5</p> <p><b>burr</b> 3:14</p> <p><b>burr.com</b> 3:18</p> <p><b>business</b> 28:9</p> <p><b>busy</b> 47:4</p> <p><b>buy</b> 148:16</p> <p><b>bvap</b> 120:22 121:21 168:2,6,9 168:19 169:6,18</p>
--	---	--	--

[bypassing - chronologically]

Page 5

<b>bypassing</b> 149:1	74:21 96:5 143:20	173:15 174:13	<b>certainty</b> 56:16
<b>c</b>	160:14 178:4,14	175:13,15	<b>certificate</b> 178:1
<b>c</b> 1:7 4:7 26:14,14	181:4 182:1 183:1	<b>cases</b> 22:12,13,22	179:10
69:16 181:4 182:1	<b>carolina's</b> 65:12	23:3 51:5,13 57:1	<b>certify</b> 178:5,8
183:1	<b>case</b> 1:6 10:9,13	57:12,17 61:10,10	<b>chain</b> 53:8
<b>calculate</b> 137:19	10:14,23 11:1,3	61:10 62:15,20,22	<b>challenge</b> 57:14
<b>calculated</b> 130:17	13:5,7,8 14:4	63:24 64:3 65:1	67:18
140:1,13 141:12	16:17 17:23 22:7	73:7 74:10,11,19	<b>challenged</b> 116:18
<b>calculations</b>	22:25 23:1,1,4,6	74:22 76:14 79:7	<b>challenges</b> 57:13
131:21	23:16 25:8,11	79:9 163:24	65:11
<b>caldeira</b> 31:15,16	26:22 27:13,17	174:16,23 175:8	<b>chance</b> 38:2 148:4
31:22,25	37:8 39:15 51:10	<b>casing</b> 83:5	150:11,19
<b>call</b> 19:10,19	51:14 52:7 53:18	<b>casted</b> 65:14 69:22	<b>change</b> 54:7
38:22,24 39:24,25	57:9 58:7,8,10,11	<b>casts</b> 69:21	132:12 155:1
40:1 55:4 56:4	58:14,19 59:11,14	<b>cause</b> 58:2 178:9	182:4,7,10,13,16
115:16 122:4	59:18,22,23 60:3	180:3	182:19
144:5	60:8 61:9,14,15	<b>caveats</b> 132:21	<b>changes</b> 65:12
<b>called</b> 11:9,13	61:16,19,20,25	<b>census</b> 61:12	167:9 181:10
25:9 46:23 49:3	62:3 63:3,5,19,25	169:15	183:6
53:5,8 54:25 73:4	64:19 65:3,20	<b>center</b> 72:4 115:25	<b>changing</b> 132:11
79:2 90:23 93:15	66:10 67:1,5,18	144:17	<b>characterized</b>
93:19 138:3	68:13,17 69:8	<b>centers</b> 71:25	70:19
<b>calls</b> 20:18,21	70:4,11,15,15	<b>cepadaa</b> 5:7	<b>charleston</b> 178:13
115:10 174:20	71:1 72:11 73:1,3	<b>cepeda</b> 2:9	178:13
175:23	73:7,23 74:3,6,8	<b>certain</b> 97:20	<b>chart</b> 133:7,8
<b>candidate</b> 76:8	74:20 75:1,2,6,20	99:18,22 118:9	<b>check</b> 24:24 58:13
<b>candidates</b> 87:12	76:24 77:8,10,12	119:7,17 123:2	64:8 70:21 91:21
<b>caps</b> 12:16 13:19	77:14 78:2,16	134:4 159:18	94:19 109:3
<b>caption</b> 59:9,10	79:2,8 80:4,12,20	160:14 167:17	<b>checked</b> 27:22
66:9	81:1,5,8,21,25	170:3	<b>chester</b> 100:1
<b>car</b> 24:17	82:9 83:25 84:10	<b>certainly</b> 14:22	106:10 108:10,17
<b>care</b> 142:25	87:14 88:15,21	19:23 46:12 47:3	110:17,17,19
<b>carlo</b> 43:13 48:20	90:21,22 91:9,15	60:7 61:7 69:9	120:9 121:25,25
52:20 53:8 90:6	91:20 92:15,16,19	70:1 74:21 78:3	122:4 125:9 134:7
127:6	93:1,10,15,16	86:14,21 95:18	134:10 136:3,6
<b>carolina</b> 1:2,4 2:2	95:8 96:19 97:4	97:12,16 102:4	<b>choice</b> 83:11
3:3,13,17 4:6	125:23 132:9	104:10,11 115:7	<b>choose</b> 157:23
10:16 11:6,18	147:20,24 151:4	143:14 151:6	<b>chris</b> 2:23 4:18
18:3,6 59:22 60:5	156:23 165:22	157:9,9 159:22	156:16
62:19 64:11 65:11	166:13 167:13	163:25	<b>chronologically</b>
66:11 67:24 74:12	168:24 169:10,15		76:18



[chronology - comply]

Page 6

<b>chronology</b> 10:10	<b>cleverer</b> 88:3	<b>colleague</b> 4:19	143:1,17,18,21,24
<b>chunk</b> 55:11	<b>close</b> 44:11 116:16	<b>collected</b> 72:22	144:3,13,14,16
<b>circulating</b> 95:19	146:17	<b>collection</b> 91:3	145:1
<b>circumstances</b>	<b>closed</b> 106:5	<b>colloquia</b> 51:18	<b>companion</b> 73:3
67:13,21 159:18	<b>closer</b> 139:20	<b>color</b> 76:2 134:12	<b>compare</b> 81:14,21
<b>citation</b> 69:16,17	<b>clue</b> 21:5 57:18	<b>columbia</b> 1:3 3:17	89:2 103:3 130:22
<b>citations</b> 16:3,6	173:20	<b>combinations</b>	164:14,15
<b>cite</b> 97:21 123:14	<b>cluster</b> 100:1,12	118:14 122:24	<b>compared</b> 81:8,11
124:19	100:15 102:16	<b>come</b> 23:6 30:3	82:14
<b>cited</b> 67:7	104:7,21,25 105:1	31:6 58:24 79:15	<b>comparing</b> 162:19
<b>citizens</b> 89:4	105:1,13,15 113:8	79:16 98:13	163:1 164:3
<b>city</b> 110:16 112:1	116:18 117:12	138:16 147:4	<b>comparison</b> 98:5
125:8	122:3,4 133:10	167:17	163:12
<b>city's</b> 150:3	134:17,18 136:20	<b>comfortable</b> 54:9	<b>compensated</b>
<b>civil</b> 2:3,9 4:14 5:2	136:21 140:7,19	113:1	24:20 25:2,7,15
5:7 173:23,25	140:23 141:1	<b>coming</b> 73:12	<b>compensating</b>
<b>claim</b> 10:18 65:17	142:1 155:5	103:2 171:11	25:15
67:14 68:5,11,23	<b>clustered</b> 75:10	<b>comments</b> 40:23	<b>competing</b> 86:23
69:1,7,10 118:22	<b>clustering</b> 75:7,8	<b>commission</b> 3:13	89:3,3
120:5 148:15	<b>clusters</b> 99:17	4:22 77:5 83:14	<b>complaint</b> 10:24
149:3	100:24 101:2	85:9,14 87:10,15	87:16 156:15
<b>claiming</b> 57:22	105:10 117:13,22	87:25 166:7	<b>complete</b> 31:3,8
<b>claims</b> 10:22	121:24 133:7	178:24 180:15	178:6 183:8
57:20 69:8	135:10,24 150:6	<b>committee</b> 90:17	<b>completed</b> 29:16
<b>clarification</b> 95:21	<b>code</b> 15:22 17:10	90:23 180:17	30:6 181:17
133:4 152:11	17:14,16 36:19	<b>common</b> 58:2	<b>completely</b> 7:9
<b>clarify</b> 9:16 19:7	54:7 55:18,24	180:3	84:9,10 102:7
37:18 66:15	90:9 97:13,17	<b>commonly</b> 49:21	115:16 123:19
103:19 175:6	98:25 99:3 104:12	<b>communication</b>	131:4
<b>class</b> 48:16,19	105:8,19 107:23	19:11,16,16	<b>complex</b> 89:14
56:17	109:12 111:22	<b>communications</b>	<b>compliance</b>
<b>classes</b> 15:14	117:25 130:16	17:20	167:16,18 168:10
48:13,20,22	131:20	<b>communities</b>	<b>compliant</b> 83:2
<b>clean</b> 123:19,25	<b>coded</b> 90:7	30:12 32:13 45:11	84:24,25 86:1
<b>cleaned</b> 41:20	<b>codes</b> 53:25	148:18 149:8,18	87:11,25 88:20
42:15	107:24	149:20,22	89:7 167:21,23
<b>clear</b> 9:24 18:18	<b>coding</b> 76:2	<b>community</b>	168:6
103:7 115:9	<b>collaborative</b>	148:23	<b>complied</b> 86:25
<b>clearly</b> 6:17 157:2	38:10 70:7 73:4	<b>compactness</b>	<b>comply</b> 85:10 86:9
158:20	73:12 79:3 81:7	112:17,18 122:21	90:1,8 167:6
	179:25 180:9	123:3,4,6 128:5	168:2

[composition - counsel]

Page 7

<b>composition</b> 154:9	151:1	<b>contract</b> 25:1,5	80:21 81:6 82:11
<b>computations</b> 45:24	<b>connect</b> 149:3	<b>control</b> 12:12	89:24 92:17 93:4
<b>computer</b> 15:22	<b>conscious</b> 167:22	28:21 143:16,18	93:16,19 98:6
<b>computing</b> 49:18	<b>consciously</b> 15:11	144:6,24 147:9	99:23 101:5,6,8,9
49:20	16:12	148:9 149:19	102:1,17 103:6
<b>concede</b> 158:1	<b>consider</b> 19:17	<b>controlled</b> 146:14	104:23 106:20,22
<b>concept</b> 125:14	49:21 70:16 166:9	146:24 147:1	108:6,7 109:2
<b>concerning</b> 80:12	<b>consideration</b>	148:10,17 149:6,7	111:2,5,6,8,12
<b>conclude</b> 34:9	78:4 84:18 127:21	149:10,11,13,14	112:13,23 113:17
<b>concluded</b> 177:20	128:1,3 129:17	149:17 151:9	113:18,20,21,24
<b>concludes</b> 67:1	146:5	<b>controlling</b> 132:12	113:25 114:13,23
176:4	<b>considerations</b>	132:17 143:21	115:1,4,7 116:6
<b>conclusion</b> 78:11	127:24 128:7	144:12,14,20,22	116:20 119:23,24
98:14 144:7	<b>considered</b> 35:23	144:25 146:6,7	121:1,10 122:1,5
145:10 174:20	145:17 148:14	<b>convenience</b> 72:2	122:6 123:2
175:24	154:21	<b>convenient</b> 71:24	125:13,18,20
<b>conduct</b> 97:11	<b>considering</b> 92:8	<b>conversation</b>	128:21,24 129:4,8
170:2	<b>considers</b> 121:2	16:16 19:9,15	130:4,7 131:11,11
<b>conducted</b> 98:14	<b>constitutes</b> 135:18	20:19 24:13,15	131:17 132:6,7
100:25	<b>constitution</b> 84:2	108:4 152:2	133:21 137:7
<b>confer</b> 94:16	<b>constitutional</b>	<b>conversations</b>	138:21 139:6
<b>conference</b> 1:4 2:2	143:1	20:9,15 94:13	140:11 141:2,9
4:6 19:10 46:19	<b>constructed</b> 90:6	<b>conversely</b> 167:20	143:15,21 144:9
66:11 181:4 182:1	<b>constructive</b> 43:13	<b>convoluted</b> 89:14	144:23 145:8,23
183:1	52:20	90:2	145:25 146:18
<b>confident</b> 144:1	<b>contact</b> 27:1	<b>copies</b> 181:14	155:22,23,25
<b>configuration</b>	<b>contain</b> 174:15	<b>copious</b> 170:25	158:4,22 159:14
106:10 110:16	<b>contained</b> 32:16	<b>copy</b> 14:13 176:22	160:9,11,24 161:3
125:16	101:11,12,20	176:25 177:10,13	164:8 169:16
<b>configurations</b>	126:9	<b>core</b> 125:11,12	170:5,10,17 183:8
114:7	<b>contains</b> 32:11	<b>correct</b> 8:6 17:17	<b>corrections</b> 183:6
<b>configured</b> 114:3	<b>contend</b> 136:15	29:3,7,8,9 31:1,2	<b>correctly</b> 56:7
<b>confirm</b> 99:2	<b>contending</b> 110:13	34:17 37:11,19,20	97:3 100:23
110:18 133:25,25	115:5	37:23 39:7,10,13	111:19 120:11
134:5	<b>contention</b> 168:13	39:18,19 40:8	143:3
<b>confused</b> 163:25	<b>context</b> 54:16,17	43:6 44:2 45:12	<b>correspond</b> 27:25
<b>congress</b> 13:11	96:15 102:13	46:10,11,14,15,17	<b>costs</b> 177:5
<b>congressional</b>	115:18 118:12	46:24,25 47:14,15	<b>counsel</b> 1:16 2:1
80:6 124:8 142:17	129:23 132:6	58:8,9 59:8 60:9	4:10 13:2 16:15
142:24 148:21	<b>continuity</b> 145:3	68:15 69:22 70:17	16:16 24:13,16
		70:18,23 77:15	28:1,2,3 40:19

[counsel - demonstrative]

Page 8

64:7 75:13 94:13 105:21,22 126:24 151:23 166:6 171:4,10 172:4,13 173:6 175:3,10 178:9 181:14 <b>counter</b> 81:12 <b>counties</b> 158:3,21 160:14,16,21 161:1 <b>counting</b> 65:13 <b>country</b> 155:21 158:16 172:5 <b>county</b> 69:22 76:5 76:7 110:17 112:1 113:12 116:19,22 116:25 120:10 125:9 136:3 149:1 153:15 155:24 156:4 157:4,7,12 157:16,21,23,23 158:4,12,25,25,25 159:3,9,14,16,21 159:25 160:8,9,10 160:22,23,24 161:3 178:13 <b>couple</b> 71:15 135:20,25 137:4,8 162:4 165:15 171:25 172:1 <b>course</b> 94:20 137:1 144:4 145:3 170:7 <b>coursework</b> 52:10 52:11 55:12 <b>court</b> 1:1 4:11 5:11,13 6:12,24 8:13 55:21,23 63:23 64:17 66:5 67:1,5,10,15 68:6 68:13 70:2 71:16	71:17,20 72:6,24 74:15 76:22 78:13 79:10,21 80:23 81:13,18 83:15,16 83:21,25 84:6,13 86:12,15,16,20,22 87:2 88:6 89:18 89:20 90:4,11 91:10,12 92:7,23 92:25 93:3,7,8,15 93:19 96:15 139:15,17 150:24 150:25 174:9 175:21 176:6,10 176:17,20 177:2,6 177:11,16 178:3 178:24 <b>court's</b> 73:19,21 83:6 88:5 <b>courts</b> 98:1 <b>cover</b> 45:10 <b>cracking</b> 75:12 <b>crafting</b> 33:10 <b>craziness</b> 60:14 <b>crazy</b> 19:2 <b>create</b> 18:14 21:7 155:24 175:8 <b>created</b> 10:16 15:18 18:9 99:6 103:5,22 117:21 118:1,1 163:12,15 <b>creating</b> 15:20 17:20 <b>credentials</b> 77:17 <b>criticisms</b> 92:7 <b>critique</b> 96:14,18 97:8 116:14 158:9 <b>critiqued</b> 92:3 <b>critiquing</b> 119:1,2 <b>cross</b> 157:20 159:16	<b>crossed</b> 160:24 <b>cs</b> 181:15 <b>currently</b> 33:3 40:7 163:13 <b>cusick</b> 2:15 5:3,3 <b>cut</b> 7:15 23:10 40:3 96:21 <b>cutting</b> 139:12,16 <b>cv</b> 1:6 13:13 65:1 90:22 91:19 179:19 <b>cycle</b> 61:11 <b>d</b> <b>d</b> 25:24 26:11 49:4 87:9,9 179:1 <b>d.c.</b> 2:21 <b>data</b> 49:22 56:17 61:12 70:21,22 72:19,22 76:5 107:18 113:22 141:18 143:8 147:8 169:15,18 169:20 <b>date</b> 1:13 4:3 13:3 25:21 59:6,17 95:13 182:24 183:12 <b>day</b> 3:8 36:17 46:3 68:4 95:16,19 178:12 183:15 <b>days</b> 60:16 61:3 68:3 181:17 <b>dc</b> 2:6 3:11 <b>dealing</b> 122:12 <b>decade</b> 47:3 <b>decide</b> 119:6 <b>decided</b> 62:16 <b>declare</b> 183:4 <b>deemed</b> 183:6 <b>deeply</b> 76:8	<b>defendant</b> 2:23 3:6 <b>defendant's</b> 156:22 158:19 171:9 173:6 <b>defendants</b> 1:8 2:23 3:6 4:17,20 4:24 18:1 67:20 144:4 156:6,15 177:1,10,13 180:23 <b>defended</b> 29:10 <b>defense</b> 2:14,18 5:4 17:23 29:13 29:20 <b>define</b> 81:10 <b>definitely</b> 149:19 154:6 165:11 170:4,9 <b>definition</b> 123:6 <b>degree</b> 157:10 166:22 <b>delaware</b> 1:15 25:25 <b>delayed</b> 95:19 <b>deliver</b> 43:19 <b>democratic</b> 70:11 82:18,21,23 83:13 83:20 86:1 90:16 90:23 169:1 180:16 <b>democrats</b> 75:14 147:13 <b>demonstrate</b> 71:22,23 <b>demonstrated</b> 143:22,24 <b>demonstrations</b> 52:14 <b>demonstrative</b> 76:3
--	--	---	---



[density - document]

Page 9

<b>density</b> 72:1	143:12 145:11	<b>disclosed</b> 50:25	56:5 172:12
<b>department</b> 51:18	146:1	51:7,14 60:20,24	179:21,23
<b>dependency</b> 125:10,13	<b>diagram</b> 33:8	61:1,2 62:5,24	<b>dissertations</b> 173:15,18
<b>depends</b> 168:23	<b>diamaduros</b> 2:25	64:4	<b>distance</b> 72:4
<b>deponent</b> 181:13	4:16 86:11,18,19	<b>disclosing</b> 175:18	<b>distinct</b> 113:13
183:3	94:21 112:15	<b>disclosure</b> 174:9,9	<b>distribution</b> 116:1
<b>deposed</b> 10:3	116:7 158:5 159:5	<b>disclosures</b> 61:6	119:14,23 127:8
<b>deposing</b> 181:13	160:12 162:21	<b>discovery</b> 146:11	130:23 131:4
<b>deposition</b> 1:11	164:10 171:8,23	147:5	133:9 134:11
4:4,8 6:7,10 9:1,5	172:21,23 173:9	<b>discriminated</b>	137:17 138:25
11:20 12:4,17,18	173:12 174:21	57:23	139:4,6 140:11
12:22 14:8,9	175:25 176:8,13	<b>discrimination</b>	141:9 144:7,18
16:18,20 22:19,21	176:19,24 179:9	10:15,21 11:1	150:7 163:2
23:2,25 24:8,12	181:1	35:19 36:4,6 39:7	<b>district</b> 1:1,2
41:3 133:19 171:5	<b>diamanduros</b> 4:17	92:5	65:10 66:5 87:11
174:6,18 176:5,12	<b>dice</b> 119:12	<b>discuss</b> 23:5 50:25	91:11 114:2,3,4,6
177:20 179:16	<b>dictate</b> 8:23	<b>discussed</b> 22:7,25	120:22 121:19
<b>depositions</b> 23:7	<b>difference</b> 113:13	24:10 38:15 65:16	123:17 124:4,10
147:5	114:2 128:13,15	68:22 95:24 150:6	124:13,21 152:21
<b>derieux</b> 2:9 5:6,7	<b>differences</b> 114:10	171:1	153:14,15 155:1,5
<b>described</b> 44:5	<b>different</b> 21:21	<b>discusses</b> 66:3	155:21 157:15
153:7	31:19,20 49:1	127:2 152:9	158:11 160:7
<b>designated</b> 13:5	73:8 79:3 102:8	<b>discussing</b> 11:5	164:5 167:12
<b>designed</b> 132:5	102:12 110:16	<b>discussion</b> 22:24	168:1,5,19 169:5
<b>desktop</b> 22:1	112:20 113:24	171:19	169:12
43:12	114:7,17 117:12	<b>disfavor</b> 143:8	<b>districts</b> 75:15
<b>detail</b> 73:18	119:19 121:16	<b>dismiss</b> 156:14,19	96:5 114:8 116:18
<b>determine</b> 72:3	122:17,24 126:6	158:19	118:15 121:20,24
<b>develop</b> 46:4	128:14 130:22	<b>dismissed</b> 156:23	122:1,5,8 123:10
49:23,25 97:14	157:23	<b>dissertation</b> 29:11	124:8 146:16
<b>developed</b> 49:8	<b>difficult</b> 12:11	29:13,17 30:6,9	148:21,25 154:9
<b>developmental</b>	89:8	30:16,20,22 31:1	160:15 161:12
112:25	<b>direct</b> 96:12	31:12,17,22 32:1	162:15 165:4,11
<b>deviation</b> 128:8	<b>directly</b> 17:14	32:2,6,7,8,8,9,10	167:4,8,15,21
137:20 140:2,3,14	<b>disagree</b> 83:6	32:18 33:6,7,11	169:4 170:3,9,13
141:13 146:20	141:15 173:4	33:13,15 34:7,7	<b>dive</b> 133:2
<b>deviations</b> 128:17	<b>disagreed</b> 83:15	34:14,25 35:8,24	<b>dividing</b> 122:8
130:10 132:1	92:25	36:3,6 37:16 38:7	<b>division</b> 1:3
137:24 140:15	<b>disclose</b> 62:1,16	38:21,22,23,24	<b>document</b> 12:12
141:13 142:19	174:2 175:20	42:17 43:9,24	12:13 13:1,16,24
		44:19 50:9 52:15	

[document - employed]

Page 10

35:3,15 37:24 38:1,5,19 43:2 95:3,5,9 112:2 156:10 <b>documentation</b> 53:16 <b>documents</b> 15:18 16:1 17:3,3,5 21:7 21:8,10,21 27:12 34:20 39:17 41:2 41:25 54:20 99:1 <b>doing</b> 25:17 38:16 51:18 54:9 152:19 162:13 <b>door</b> 41:22 <b>doubt</b> 159:10 <b>download</b> 53:1,3 53:17,24 54:4 97:7 <b>downloaded</b> 52:25 53:15,22 <b>dozen</b> 124:8 <b>dozens</b> 20:5,10,11 <b>dr</b> 37:7 39:10,13 41:22 48:7,10,18 48:24 49:8,23 52:13,22 55:18 63:10,16,17 82:14 87:9,9,14,18,24 88:17,17 89:12,12 89:16 90:5,9 92:4 92:10 94:25 95:8 95:16,17,22,25 96:7,8,14,18 98:10 102:4 105:8 106:11,17 107:20 107:22 108:2 109:20 111:15,21 112:19,24 113:3,4 116:14 118:22 120:4 142:2	143:22 146:6 147:7 152:10,12 155:13,17 157:24 158:1,9,14 160:23 161:2,7,10,12 162:10,10,18 163:1,17 164:4,19 165:2,3 169:23,25 180:19 <b>draft</b> 30:19 32:1,7 37:16 38:23,24 42:25 43:8 45:14 50:8 <b>drafted</b> 42:20 44:21 <b>drafting</b> 81:22 175:1 <b>drafts</b> 29:16 31:16 31:23 64:13 <b>draw</b> 87:11,16,25 88:20,24 89:7 122:25 123:20 124:12 141:20 159:9 <b>drawer</b> 155:20 157:14 158:10 160:6 <b>drawers</b> 125:15 126:2 142:25 <b>drawing</b> 85:14 122:20 123:16 124:6,11 128:4 143:15 144:3 146:15 149:21,22 169:4 <b>drawings</b> 167:22 <b>drawn</b> 89:4 119:18 120:15,16 127:19 142:25 143:7,8,25 145:13 146:4 150:2 151:1	151:6 163:9 165:11 167:5 168:2 170:4,9 <b>drew</b> 85:11 <b>drill</b> 61:11 <b>dropped</b> 44:7 87:18 <b>dropping</b> 43:21 <b>duchin</b> 21:13 <b>duchin's</b> 142:2 <b>duly</b> 5:16 <b>duplicate</b> 100:20 101:11,25 102:5,7 103:9 <b>duplicates</b> 99:19 99:21 100:5,9,9 100:17 101:22,25 102:6 103:1,15,16 103:18 104:14 118:8,9 120:17 <b>duties</b> 174:13 <b>e</b> <b>e</b> 19:13,16 20:4,11 25:24,24,24 26:1 26:8,10,11,11,14 26:14,14 27:6 31:21 49:4 62:4 64:6 87:9 94:15 94:22 151:25 171:4 176:23 177:5 179:1,14 182:3,3,3 <b>earlier</b> 9:18 44:18 64:3 97:14 142:12 <b>early</b> 14:23 15:2 36:17 68:3 71:24 93:24 <b>ease</b> 11:22 <b>easier</b> 85:17 90:7 153:1	<b>east</b> 111:14,17,21 111:25 112:1,4,7 112:9,11 <b>eastern</b> 4:3 <b>edit</b> 138:17 <b>edits</b> 41:21 <b>educational</b> 2:14 2:18 5:5 28:25 <b>effect</b> 30:11 32:12 45:11 65:16 158:3 <b>efficiency</b> 74:10 75:11,16 <b>eight</b> 71:4,6 98:8 108:13,17 111:8 113:19 115:3 120:11,20 135:15 153:9 <b>eip</b> 72:4 <b>either</b> 7:24 15:1 17:5 18:15 37:22 38:25 41:14 57:16 60:5 90:4,9 101:8 107:9 110:14 116:6 117:5 124:5 125:24 129:7 131:7 133:15 134:1 141:4 <b>elderberry</b> 1:15 25:24 <b>election</b> 3:13 4:22 177:10 <b>elections</b> 69:4 77:21 78:8,12 169:20 <b>electronic</b> 99:5 <b>elimination</b> 65:13 <b>embarrassing</b> 59:4 118:18 <b>employ</b> 39:9 <b>employed</b> 15:22 37:10 39:12
---	---	--	--

[employed - extent]

Page 11

<p>174:12  <b>employee</b> 174:14  <b>employing</b> 52:19  <b>enable</b> 35:13  <b>enables</b> 49:20  <b>enacted</b> 11:13,14  11:21 12:1 18:10  18:14 81:8,14  83:2 84:25 86:8  96:4 109:25 110:4  110:9,14,20  111:11 114:12  115:6 121:9  134:10 135:6,11  135:24 136:3,6,12  136:16,22,24  137:1,6,15,17,20  138:24 139:2,5  140:3,10,23 141:8  141:10 142:17,24  144:17 146:1  150:7 162:19,20  163:2,13,13,18,23  164:1,4,6,16,20  168:1  <b>enacting</b> 86:7  <b>ended</b> 169:5  <b>enrolled</b> 46:5  <b>ensemble</b> 106:11  106:13,18 127:9  127:10 128:2  142:15 144:18  146:24 147:2  <b>ensembles</b> 127:13  <b>entirely</b> 7:2 141:8  <b>envelope</b> 155:17  <b>equally</b> 125:1  <b>equivalently</b>  127:11  <b>errata</b> 181:11,13  181:17</p>	<p><b>erratas</b> 181:15  <b>especially</b> 6:16 7:4  7:21 174:12  <b>establish</b> 72:22  <b>established</b> 46:9  46:12 136:10  151:4  <b>et</b> 1:4,7 2:2 4:6,7  <b>evaluating</b> 96:15  119:4  <b>events</b> 178:10  <b>everybody</b> 7:23  <b>evidence</b> 76:12,15  76:23 84:21 87:10  87:15,23,24 88:17  90:12 125:22  126:5 127:18  157:6 167:25  168:24 169:2  <b>evident</b> 144:12  <b>exact</b> 10:9 69:5  104:15 111:22,23  129:6  <b>exactly</b> 56:22  104:5 116:4 120:6  120:21 148:19  175:14  <b>examination</b> 5:17  172:20 179:6,8  <b>examine</b> 65:17  <b>examined</b> 89:1  <b>examining</b> 144:24  145:7  <b>example</b> 13:11  16:6 76:7 92:9  100:1 106:9  120:22 123:17  125:8 129:10  148:18 168:5  <b>exception</b> 160:16</p>	<p><b>exclude</b> 72:24  73:19  <b>excluded</b> 102:1  <b>excused</b> 123:19  <b>executed</b> 55:24  <b>exhibit</b> 12:4,7  13:13 34:25 38:7  38:9,13,14 57:25  58:2,4 64:22 70:6  73:25 77:2,4  90:16 94:25 95:4  152:3,5 156:6,10  179:16,18,20,22  179:24 180:1,3,5  180:7,8,10,11,13  180:16,18,20,21  180:23  <b>exist</b> 112:13  <b>existing</b> 127:20  162:9  <b>exists</b> 34:3 118:9  131:12  <b>expect</b> 25:7 29:5  29:22 44:19,23,23  45:18 122:7,12  <b>expectation</b> 30:1,3  <b>expected</b> 140:10  141:17  <b>expedited</b> 177:4  <b>experience</b> 7:23  123:16 124:6,7,16  124:17,23  <b>expert</b> 11:12 13:5  13:21 14:3 21:11  21:14,15,23 24:14  29:4 30:8 37:7,11  37:13 48:7 50:17  50:21,22,22,23  51:3,16,25 52:23  55:23 56:12 57:1  57:7 58:11,13,19</p>	<p>59:3,18 60:5,8  61:1,3,4,6,15,18  61:19,22,24 62:2  62:14,17,21 63:4  63:25 65:9,15  66:4 67:4 68:12  68:17,21,24 69:1  69:3,5,8 70:3,11  70:14,19 72:10,25  73:20 74:8,9,15  76:24 77:12 78:2  79:8 82:9 90:22  91:14 95:7 96:7  97:21 99:15 100:2  100:15 108:20  142:11 147:22  165:22,25 166:3,6  166:8,9 173:6  174:2,9,12,14,18  175:2,18,19  <b>expertise</b> 77:21  78:7,11 166:5  <b>experts</b> 17:23  40:22 61:8 86:3  93:6 96:4 105:17  131:19 147:19  166:20 173:14  <b>expires</b> 178:24  <b>explain</b> 170:18  <b>explained</b> 73:18  <b>explaining</b> 113:23  <b>explanation</b> 126:7  155:10  <b>explicit</b> 112:8,10  <b>export</b> 59:22,25  60:4,9 73:23  <b>exposed</b> 51:20  <b>express</b> 147:15  <b>extent</b> 67:4 84:17  172:8</p>
--	---	--	---

[extreme - generated]

Page 12

<b>extreme</b> 127:7 <b>eye</b> 121:19 <b>eyeballing</b> 133:14 133:25 141:17 <hr/> <b>f</b> <hr/> <b>facebook</b> 28:5,8 28:13 <b>fact</b> 62:23 68:19 68:25 76:22 78:4 92:12,21 109:18 111:4,22 145:22 146:17 <b>factor</b> 125:2 146:15,22 163:7 <b>factors</b> 72:2 93:2 137:14 146:12 148:8,13 149:9 157:2 <b>factual</b> 173:5 <b>fails</b> 181:19 <b>fair</b> 69:23 77:2,8 80:3 83:8 127:15 135:2 143:11 154:3 173:9 180:11 <b>fairfield</b> 125:9 <b>fall</b> 141:1 174:24 <b>falls</b> 140:23 168:10 <b>familiar</b> 54:11 173:23 <b>far</b> 89:20 164:11 <b>farther</b> 127:15,22 128:10 <b>faster</b> 30:4 <b>favor</b> 87:12 143:8 <b>february</b> 14:15,25 15:2 59:4,15,19 60:1 80:20 81:4 <b>federal</b> 64:17 65:10 173:23,25	<b>feed</b> 28:12 <b>feel</b> 54:9 112:25 <b>fell</b> 144:17 <b>felt</b> 77:20 <b>fifty</b> 67:3,17 68:2 68:14 <b>fight</b> 77:2,8 180:11 <b>figure</b> 52:12 72:20 128:21 131:11,17 <b>file</b> 53:17 79:24,25 79:25 81:2 <b>filed</b> 23:19 56:25 80:6 91:8 <b>files</b> 17:7 <b>filing</b> 60:14 <b>filled</b> 74:11 <b>final</b> 40:1,4 41:2,4 78:11 161:5 <b>finalized</b> 40:21,24 64:16 <b>find</b> 90:7 93:7,8 <b>findings</b> 53:25 <b>fine</b> 8:21 66:17 97:8 124:1 173:3 <b>finish</b> 7:1 8:18 29:17 39:17 160:2 168:16 173:2 <b>fire</b> 61:11 <b>firm</b> 169:1 <b>first</b> 5:16 14:4 23:18,25 24:8 30:16 31:18 38:20 38:21 54:5 55:6 65:1 71:15 81:1 95:5 106:12 108:16 109:14 122:11 152:11 <b>five</b> 14:4 19:4,22 65:5 129:14 171:14	<b>fix</b> 7:24,25 <b>flaws</b> 153:21 <b>floating</b> 26:18 <b>floor</b> 2:16 <b>flooring</b> 155:4 <b>focus</b> 32:20 33:5 33:14,24 119:25 120:2 <b>focuses</b> 30:9 32:18 33:7,14,17,19 34:8,11 <b>focusing</b> 102:14 <b>followed</b> 53:20 <b>following</b> 164:24 <b>follows</b> 5:16 <b>footnote</b> 69:13,15 <b>footnotes</b> 68:20 <b>force</b> 129:22 <b>forces</b> 158:24 <b>forcing</b> 159:2,16 <b>foregoing</b> 178:5 183:5 <b>foreman</b> 3:14 <b>forgot</b> 17:9 60:13 60:21 <b>forgotten</b> 86:3 143:23 156:20 <b>form</b> 86:11 112:15 116:7 158:5 159:5 160:12 162:21 164:10 174:19 <b>format</b> 41:4,8 <b>formatting</b> 40:5 <b>former</b> 156:18 <b>forth</b> 9:8 27:6 79:21 172:24 <b>forward</b> 165:21 165:25 173:8 <b>found</b> 70:2 84:2 92:7 107:12 124:3	<b>foundation</b> 4:14 <b>four</b> 60:16 61:3 106:18 108:19 109:2 153:9,12 174:17 <b>fourth</b> 80:8 <b>frankfurt</b> 44:11 <b>frankly</b> 40:22 83:10 <b>frequently</b> 47:21 <b>fresh</b> 115:17 <b>friday</b> 43:18 <b>fried</b> 163:24 <b>front</b> 21:22 22:4 59:5 118:25 152:15 153:4 161:18 <b>full</b> 5:21 28:13 <b>fun</b> 46:4 <b>fund</b> 2:14,19 5:5 <b>further</b> 51:9 155:6 175:25 178:8 <hr/> <b>g</b> <hr/> <b>g</b> 62:4 96:8 <b>gap</b> 74:11 75:11 75:16 <b>garbled</b> 7:25 <b>geek</b> 119:13 <b>general</b> 114:15 152:17 157:3,7 158:20 159:12 <b>generalization</b> 132:15 <b>generally</b> 47:5 92:9 148:1 173:24 175:4 <b>generate</b> 105:18 107:23 137:2 <b>generated</b> 104:20 136:25
--	---	--	--

[generator - header]

Page 13

<b>generator</b> 98:20 99:2,4,23 103:6 103:22 117:20 <b>generic</b> 19:8 <b>genuine</b> 62:18 <b>genuinely</b> 147:4 <b>gerrymander</b> 86:24 93:18 127:22 129:14 146:10 <b>gerrymandered</b> 127:17 <b>gerrymandering</b> 10:15,18,21 35:16 35:25 36:2 37:1,5 37:15 39:3 48:3 51:4,14 57:19 62:20 75:19 79:4 83:5,12,13,19,20 127:2,14 128:21 128:24 129:2,6,25 130:16,24 131:5 132:4,5,9,18,22 132:23,24 133:5,9 134:19,24 135:11 136:11 137:2 142:16,18 143:13 145:8,21,22 146:2 <b>gerrymanders</b> 82:18,21,23 86:1 <b>gerund</b> 32:25 33:22 <b>getting</b> 16:13 96:13 114:16 115:16 <b>ghaps</b> 36:16 <b>gill</b> 73:25 74:4 180:10 <b>gist</b> 74:25 <b>github</b> 53:2,15	<b>give</b> 9:14 15:15 54:20 56:23 58:21 70:12 72:13 76:15 77:18 93:10 105:16 118:12 129:14,25 142:5 161:20 <b>given</b> 170:25 171:7 175:21 183:9 <b>gives</b> 119:17 <b>giving</b> 53:24 174:14 <b>glad</b> 101:13 103:19 120:19 173:1 <b>gmail</b> 26:6,16 <b>gmail.com.</b> 26:17 <b>go</b> 6:6 7:24 8:4 9:9 22:16 25:8 30:1,2 39:16 41:21 42:21 42:23 43:1,16 44:9,13 47:22 52:11 66:14 80:1 81:2 83:23 86:4 105:2,7,25 117:14 117:15,16,17 118:6 134:6 142:14 154:6 155:9 157:22 161:5 166:1,23 172:24 <b>goal</b> 157:10,22 160:8 <b>goes</b> 15:17 150:24 <b>going</b> 6:24 11:21 12:7 13:16 14:6,7 22:22 29:16 34:23 39:25 41:4,21 45:21,23 50:25 58:15,21 60:15	61:8 64:5 66:6,14 68:21 69:11 73:14 76:17 79:21 85:8 90:20 93:21 94:3 95:11,22,24 119:7 119:8,8 126:5,18 131:6 134:14 137:1 138:3 142:4 146:11 150:4 151:16 156:9 158:6 164:17,20 165:24 171:5,10 171:11,18 172:5 172:17 173:2,24 174:7 <b>goj</b> 17:9 <b>good</b> 5:19,20 8:2 41:23 55:11,11 87:22 126:4 <b>goodness</b> 26:4 <b>gore</b> 3:9 <b>gotten</b> 95:14 <b>government</b> 81:15 <b>governors</b> 11:16 <b>grad</b> 32:5 <b>graduate</b> 29:25 <b>graph</b> 129:11 130:7 133:5 <b>graphs</b> 129:1 130:4 131:8,10 133:3,6,21 <b>great</b> 12:11 14:14 68:18 95:21 106:16 118:3 127:14 142:4 153:3,6 162:25 <b>greater</b> 73:18 <b>greenville</b> 3:3 <b>greg</b> 31:15 <b>ground</b> 6:6	<b>group</b> 73:8 89:5 113:12 <b>grouping</b> 162:10 <b>guarantee</b> 100:18 <b>guess</b> 16:18 17:10 18:21 35:20 44:11 64:20 79:19 84:22 96:8 114:5 115:16 139:2 143:18 <b>guesstimating</b> 137:8 <b>guideline</b> 156:3 <b>guilty</b> 75:2
<b>h</b>			
<b>h</b> 156:15 179:14 182:3 <b>h4493</b> 11:9 <b>habit</b> 123:11 124:4,21 125:1,10 125:13,17 126:7 129:22 <b>half</b> 20:21,24 21:1 50:7 <b>hamptons</b> 148:24 <b>hand</b> 142:18 178:11 <b>handful</b> 165:3 <b>handle</b> 28:16,20 <b>happen</b> 168:23 <b>happens</b> 9:17 112:11 138:8 139:22 <b>happily</b> 63:15 <b>happy</b> 62:13 103:18 104:13 <b>hard</b> 72:14 85:6 172:15 <b>harrison</b> 3:20 <b>head</b> 6:21 51:1 <b>header</b> 103:13,14			



[heads - includes]

Page 14

<b>heads</b> 122:22	<b>honestly</b> 139:21	108:22,24,24	106:11,17 107:20
<b>health</b> 56:18	147:14 148:6	109:15,21,25	107:22 109:20
<b>hear</b> 117:24 139:8	<b>hope</b> 24:22,24	110:3 114:1	111:15 120:4
162:2	25:10 29:17,24	115:14 122:23	147:7 161:12
<b>heard</b> 54:15	30:1 71:10	<b>identification</b> 12:5	162:10 164:4,19
<b>heavily</b> 87:13	<b>hoping</b> 29:15	13:14 35:1 38:8	165:3
<b>heavy</b> 134:17,18	<b>hotmail.com.</b>	38:11 58:1,3,5	<b>immediately</b>
143:7 145:13	26:11	64:23 70:8 74:1	121:6
<b>held</b> 4:8	<b>hour</b> 20:22,24	77:3,6 90:18 95:1	<b>implausible</b> 143:6
<b>hello</b> 151:22	21:2,4	152:4,6 156:7	145:12 146:3
<b>helped</b> 18:14	<b>hours</b> 34:21	<b>identified</b> 167:4,8	<b>implications</b>
49:23,25 50:1	<b>house</b> 2:23 4:17,20	167:12	153:17
97:14	10:17 11:5,9,17	<b>identify</b> 72:21	<b>implied</b> 72:19
<b>helpful</b> 117:19	13:8 18:4 44:3,4	161:1 170:12	<b>important</b> 7:4
118:3 145:6	96:5 152:5 156:6	<b>ii</b> 2:19	13:3 102:13
<b>hereto</b> 183:7	156:15,22 158:19	<b>illegal</b> 88:24	115:18 118:12
<b>hereunto</b> 178:11	171:9 176:25	168:11	<b>importantly</b> 87:8
<b>hey</b> 126:23	180:21,23	<b>illogical</b> 85:5	<b>impossible</b> 88:8
<b>hi</b> 5:6,9 94:9	<b>housed</b> 43:15	<b>image</b> 99:9	89:7 141:20 143:6
<b>high</b> 168:20 169:3	<b>huh</b> 6:21 32:19	<b>images</b> 108:15	145:12 146:4,17
<b>higher</b> 121:16	44:17 53:10 54:13	110:12 111:4	146:22
128:20 129:2	61:14 75:3 113:10	114:12	<b>impression</b> 105:4
<b>highlight</b> 66:24	119:15	<b>imagine</b> 107:16	<b>improve</b> 35:12
150:16	<b>hundred</b> 135:20	<b>imai</b> 16:7 21:13	<b>inaccurate</b> 9:23
<b>highlighted</b> 66:25	135:25 137:5,9	37:7 39:10 41:22	<b>inactive</b> 93:18
71:15,19 72:16	<b>hurt</b> 147:13	48:7,18 49:8,23	<b>inaudible</b> 31:5
73:15 75:24 76:1	<b>husted</b> 38:10 70:7	52:13,22 63:10,16	96:20 139:7 159:4
82:13 84:5 87:5	70:12,15 71:1	63:17 87:9,14	<b>include</b> 51:10
92:1 96:2 157:1	73:4 179:25 180:9	94:25 95:8 96:7	68:24 72:25 73:22
<b>hired</b> 63:6,7,9	<b>i</b>	98:2 105:8 108:2	92:14,16 100:2,14
<b>histogram</b> 118:13	<b>iceland</b> 16:23 43:3	111:21 112:19,24	101:3 102:16
120:10 121:6	43:5,9,16,22 44:7	113:3,4 116:14	103:23 108:8
<b>histograms</b> 120:4	44:12	118:22 127:6	111:1 113:16,19
120:20	<b>idea</b> 33:1 51:21	143:22 146:6	117:2 125:22
<b>history</b> 92:5	56:19 146:11	163:1,17 169:25	132:21 169:18
<b>hold</b> 109:18	147:3,4 153:16	180:19	<b>included</b> 67:17
133:18 139:19	165:24	<b>imai's</b> 87:24 88:17	92:18 101:24
<b>home</b> 42:14	<b>identical</b> 106:19	89:12,16 90:9	103:4 110:4,12
<b>honest</b> 33:9 77:22	106:21,24 107:2,3	95:16,17,22,25	111:4 117:7
88:5 89:13	107:4,6,7,7,8,10	96:14,18 97:23	<b>includes</b> 33:4
	107:15,19 108:2	98:10 102:4	

[including - know]

Page 15

<b>including</b> 30:10 32:24,25 33:3 34:1 65:12 133:19 157:12 171:3 <b>inconsistent</b> 159:23 160:4 <b>incredibly</b> 89:14 <b>incumbent</b> 154:12 <b>indentation</b> 128:24 <b>independent</b> 166:7 <b>index</b> 3:22 37:15 48:3 127:2,15 128:21 129:2,7,25 131:5 132:4,18,22 133:5,9 134:19,24 136:11,13 142:16 142:18 143:13 145:8,21 146:2 179:12 <b>indicate</b> 143:13 <b>indices</b> 130:16,24 135:11 137:2 <b>indirectly</b> 17:13 <b>inference</b> 128:8 <b>inflate</b> 75:16 <b>influence</b> 143:2 <b>information</b> 9:16 15:16 62:12 64:15 76:6 92:6 99:1 171:1,10 179:12 179:13 <b>ingram</b> 2:19 <b>inherent</b> 168:22 <b>inherently</b> 168:23 <b>initially</b> 27:1,9 <b>inla</b> 35:20 36:20 37:12 45:4 <b>inquiry</b> 34:11 84:8 <b>insert</b> 42:20	<b>inserting</b> 45:4 <b>insignificant</b> 92:8 <b>instruct</b> 9:7 <b>instructions</b> 52:25 53:20,24 <b>instructs</b> 105:22 175:3 <b>intact</b> 157:21 <b>integrated</b> 35:11 <b>intend</b> 86:9 <b>intended</b> 84:10 86:9 <b>intent</b> 10:19 34:12 37:5 65:18 <b>intention</b> 11:1 35:22 160:8 <b>intentional</b> 35:19 36:4,5 39:6 <b>intentionally</b> 174:23 <b>interest</b> 30:12 32:13 45:11 148:18,23 149:8 149:18,20,23 <b>interested</b> 131:21 149:21 178:10 <b>interesting</b> 93:7,9 <b>interests</b> 150:3 <b>interference</b> 23:8 <b>interim</b> 56:20 <b>introduce</b> 4:10 <b>introduced</b> 82:15 <b>intuit</b> 114:18 <b>intuition</b> 103:17 <b>involve</b> 47:16 62:21 174:14 <b>involved</b> 65:11 67:18 <b>irrelevant</b> 39:15 73:21 92:11,21,24 93:4,8,9,16,19	131:6 <b>irvin</b> 36:16 <b>issue</b> 10:19 12:1 93:2 142:6 161:7 161:9 172:14 <b>issues</b> 7:21 8:1 65:18 <b>item</b> 174:1,16 <b>iterations</b> 31:19 <b>j</b> <b>j</b> 3:8 <b>james</b> 2:23 4:18 156:15 <b>jane</b> 3:15 4:21 177:9 <b>january</b> 15:1 18:24 23:22 25:22 80:15,16,18 81:4 81:24 95:15,20 <b>jcusick</b> 2:17 <b>jmc</b> 1:6 <b>job</b> 147:16,20 175:12 <b>joesday.com</b> 3:12 <b>john</b> 2:15 3:9 5:3 <b>jones</b> 3:8 <b>jordan</b> 2:24 4:18 96:8 156:16 <b>journal</b> 46:9,13 <b>jtrinkley</b> 3:18 <b>judge</b> 70:15,20 77:20,20,25 92:20 <b>julie</b> 1:17 176:9 178:3,23 <b>july</b> 178:25 <b>junk</b> 36:21 <b>k</b> <b>kdiamaduros</b> 3:4 181:2	<b>keep</b> 157:21 171:6 175:9 <b>keeps</b> 110:16 <b>kenny</b> 3:8 4:23,23 177:12,12 <b>kentucky</b> 44:9 50:21 63:4,19,22 63:22 64:8 <b>key</b> 75:15 <b>kid</b> 44:7 <b>kids</b> 43:19 <b>kind</b> 9:8 33:12 51:21 52:9,17 61:13 64:2 73:8 79:22 121:2 130:21 <b>kinds</b> 22:5 <b>knew</b> 42:10 124:14 171:10 <b>know</b> 7:3,23 10:2 10:9,19,25 11:2,8 12:18 13:23 14:7 14:19 15:14 18:2 18:21 19:21 20:23 20:25 23:11,13 26:4 27:18,19 31:24 32:3 33:8 49:13,19 52:10,11 53:5,11,12 54:17 55:4,4 56:1 58:18 61:7,8 63:20 64:21 66:9 67:7 68:2 70:25 76:6 78:25 79:23 80:3 80:7,11,14 83:9 84:8,9 86:13 87:3 87:3 89:15,16,21 95:4 97:8,18,24 98:2 102:8,10 103:14,24 104:17 104:25 105:9
---	--	--	---

[know - look]

Page 16

112:22 113:7 119:2,10,13 120:12 121:21 122:13,16,19 123:1,3 128:4 131:5 135:5 136:1 137:23 144:2 146:12,15 147:11 147:14 148:1,2,25 150:10 152:14 156:19 157:21 160:20,21 163:9 163:21 164:11 166:4,22 169:1,6 172:22 173:17,21 176:7,21 177:5 <b>knowing</b> 101:18 <b>knowledge</b> 15:6 94:18 173:14 <b>konstantine</b> 2:25 4:16 38:14 86:19 181:1 <b>kosuke</b> 94:25 96:7 180:19	<b>largest</b> 141:1 <b>late</b> 15:1 18:24 61:12 172:12 <b>latest</b> 42:16 <b>latex</b> 39:24,24,25 40:5,5,7 <b>law</b> 11:8 65:13 71:1 83:2 84:24 85:1 86:10,25 93:2 <b>laws</b> 44:9 65:12 67:3,16,19,22,23 68:14 89:14 90:2 90:8 <b>lawsuit</b> 23:18 <b>lawyer</b> 156:19 173:22 <b>lawyer's</b> 147:16 <b>lawyering</b> 88:3 <b>lawyers</b> 46:2 <b>laying</b> 149:15 <b>lead</b> 84:3 <b>leading</b> 112:8 <b>league</b> 77:4 180:13 <b>learn</b> 50:3 53:7 71:11 80:16 <b>learned</b> 15:14 51:15,17 52:5,8 55:12 71:8 <b>lease</b> 36:18,20 <b>leave</b> 93:24 171:11 172:18 <b>leaving</b> 78:6 <b>left</b> 43:22 96:12 148:3 <b>legal</b> 2:14,18 3:20 5:4 83:3,8 89:13 93:10 174:20 175:24 181:23	<b>legislative</b> 144:2 <b>legislature</b> 11:16 18:7,11 79:22 86:8 109:21 113:5 119:22 123:1,18 143:25 148:11,14 156:3 157:17,22 160:24 <b>legitimacy</b> 115:11 119:3 <b>length</b> 19:12 20:17 99:7 <b>lessons</b> 71:8 <b>level</b> 144:15 168:2 <b>lexington</b> 43:20 44:9 <b>liberties</b> 2:3,9 5:7 <b>liberty</b> 4:14 5:2 <b>lichtman</b> 92:10 <b>lichtman's</b> 92:4 <b>life</b> 16:18,19,20 <b>limit</b> 157:7 159:21 160:9 <b>limitation</b> 155:6 <b>limited</b> 158:1 <b>limiting</b> 160:10 <b>line</b> 8:19 122:8 157:1 158:18 160:24 164:24 167:22 169:3 179:3,15 182:4,7 182:10,13,16,19 <b>lined</b> 143:24 <b>lines</b> 114:1 123:17 157:5,12,21 159:10,14,16 <b>list</b> 34:16 58:10 59:21 60:4,11,25 61:15,24 62:24 65:1 90:21 91:19 99:10 160:22	166:2,4 167:15,20 174:16 <b>listed</b> 60:19,23 66:15 73:5 <b>literature</b> 52:18 <b>litigation</b> 12:2 22:23 <b>little</b> 61:11 71:22 72:7 76:13,15,23 90:11 114:4 132:15 140:16 <b>liu</b> 21:16 <b>lives</b> 152:25 <b>llc</b> 2:24 <b>llp</b> 3:14 <b>local</b> 8:23 <b>located</b> 124:10 <b>location</b> 1:15 <b>locations</b> 21:21 71:24 72:5 <b>lodged</b> 9:10 <b>log</b> 26:20 28:10 <b>logged</b> 28:11 <b>logically</b> 84:23 85:3 <b>logistic</b> 152:19 <b>logistics</b> 48:11,12 <b>long</b> 18:22,25 19:1 19:17 24:15 33:21 46:5 55:5 65:23 66:9,13 67:6 69:21 95:5 123:18 <b>longer</b> 20:20,24 21:1,4 <b>longitudinal</b> 56:17 <b>look</b> 16:5 28:18 41:22 63:21 104:2 105:7 110:9,15 111:11 113:25 114:12 115:6 121:19 122:18,23
<b>I</b>			
<b>I</b> 1:17 2:19 25:24 26:14,14,14,14 62:4 178:3,23 <b>labeled</b> 133:8 138:12 <b>lacked</b> 77:16,20 <b>lag</b> 7:5,22 12:8 <b>language</b> 30:15 41:20 42:15 49:18 49:20 55:3,5 161:21,24 <b>laplace</b> 35:12 <b>laptop</b> 43:3 <b>large</b> 19:9 178:5 <b>larger</b> 140:17 141:16			



[look - mccrory]

Page 17

126:6 128:19,25 136:2,5,24,25 137:5,7 148:19 153:11 154:20 168:25 <b>looked</b> 41:2 109:2 109:24 110:13,19 167:10 <b>looking</b> 114:8 120:10 130:21 134:14 147:7 163:4 <b>looks</b> 95:7 108:10 108:11 110:3 115:17 129:3 134:22 136:16,18 141:10 142:1,2 152:18 154:8,18 <b>loop</b> 1:15 25:25 <b>lot</b> 33:9 43:13 55:10 63:16 119:9 122:9,18,24 136:2 136:5 137:9 148:21 156:20 161:25 <b>lots</b> 120:17 <b>lottery</b> 119:12 <b>louisiana</b> 3:10 <b>loved</b> 155:8 <b>lucas</b> 2:23 4:18 156:16 <b>luke</b> 3:7 4:24 <b>lunch</b> 93:24 <b>luster</b> 105:5 <b>lying</b> 149:6,12	<b>mailed</b> 94:15 151:25 171:4 <b>mails</b> 20:11 27:6 <b>main</b> 3:2,16 27:2,3 47:23 <b>making</b> 15:23 57:19 <b>mandate</b> 143:1 <b>manner</b> 171:3 <b>mantle</b> 73:9 <b>map</b> 10:17 11:4,12 11:14,14,15,21 12:1 13:8,9 18:10 18:14 72:5 81:8 81:14,16,21 83:3 84:24,25 93:17,18 99:11,12 100:19 100:25 101:10,24 102:4 103:8 104:4 104:7,22 105:12 108:25 109:20,21 109:25 110:4,9,14 110:19,20,23 111:12 114:2,3,12 115:1,6,17 116:24 117:11,15,16,17 117:18,21 125:15 126:1 127:7,16,20 127:23 128:2,10 128:14,20 129:1,7 129:12,13 132:1 134:10 135:6 136:12,16 137:6 137:20 138:10,11 138:13,24 140:23 141:19 142:2,17 142:24,25 143:6 143:15 145:13 146:1,4 150:7 151:1 155:20 157:14 158:10	159:9 160:6,21 163:18,23 164:16 165:6,7 <b>mapmakers</b> 112:17 <b>maps</b> 54:10 71:16 71:21 72:7 75:20 76:3,23 80:8 81:8 81:15 83:1,14 89:12,20,21 90:1 90:5 96:16 98:10 98:11,17,19 100:1 100:2,11,14,19 101:3 102:7,8,11 102:24,25 103:3,4 103:5,16,22 104:9 104:10,11,18 105:5,10,15,18,23 106:10,11,17,18 107:20,22,23 108:6,16 109:4,8 109:14,19 110:3 111:11,18,25 112:5,6,20 113:13 113:16,24 114:6 114:17,22,25 115:6,14 117:5,7 119:4,8,18 120:12 120:13,15,15,18 122:9,18,20,23 123:16 124:6,7 130:11,22 134:18 134:18,23 135:10 135:17,24 136:2 136:11,21,24,25 137:10,10 140:23 141:25 142:15 143:24 148:2,19 149:21 150:2,19 151:6 159:25 161:13 163:8,25	164:1,19,20,22 <b>margin</b> 76:5 <b>mark</b> 40:23 <b>marked</b> 12:5 13:14 35:1 38:8 38:10,13 58:1,3,5 64:23 70:7 74:1 77:3,5 90:17 95:1 95:4 152:3,6 156:7 <b>markov</b> 53:8 <b>maryland</b> 10:8 22:21,25 23:1 50:22 57:15 61:16 61:19 62:3 64:7 126:12,13 <b>mass</b> 119:6 <b>master's</b> 55:6 <b>material</b> 15:9,10 171:6 <b>materials</b> 15:3,5 16:14,25 172:7,9 <b>math</b> 97:9 116:10 <b>mathematical</b> 45:24 119:13 124:20 <b>mathematically</b> 116:2 <b>mathematics</b> 96:14,18 119:1 <b>mathias</b> 3:1 4:19 24:2,3,5 <b>matter</b> 4:5 45:3,3 68:19 79:25 80:7 116:5 137:3 <b>mccartan</b> 16:7 97:23 98:2 127:5 <b>mccrory</b> 64:22 65:2,10 66:11 72:21 180:7
<b>m</b>			
<b>m</b> 3:9 87:9 <b>madam</b> 139:15 <b>mail</b> 19:13,16 20:4 26:1,8 31:21 64:6 94:22 177:5			

[mcmc - named]

Page 18

<b>mcmc</b> 53:8,12 <b>mean</b> 13:8 15:12 15:16 16:3,23 18:25 19:5,8,9,11 22:5 24:3 33:7 34:1,2 36:13,23 36:25 42:22 47:4 47:20 49:11,12,17 50:7 52:9 53:23 54:3,14 55:10 60:16,22 63:15 69:5 78:3 79:19 82:25 83:24 85:12 86:24 88:1 89:23 95:18 97:12 98:11 99:11 100:5 102:5 104:8 105:16 107:9 108:23 113:25 116:3,6,13 117:10,23 120:9 120:14 124:9,17 127:10,16 128:14 128:21 129:3,7,9 129:11,21 130:6 130:10,19 131:5,9 131:15 132:1 135:2,25 136:16 136:17,18 137:14 137:21,24 139:25 140:3,16 141:4,17 141:20,25 142:20 143:12 145:12 146:2,7 147:7 155:7 157:9 159:8 <b>meaning</b> 105:12 118:7 <b>means</b> 33:3,23 36:14 54:21 106:13 122:21 142:3 146:3	<b>meant</b> 81:18 138:16 <b>measure</b> 75:12 87:7,20 128:15 <b>mechanism</b> 72:3 <b>media</b> 28:4,22 <b>meet</b> 18:20 20:6 57:18 <b>meeting</b> 19:8,17 20:20 <b>members</b> 18:3,6 18:11 <b>mention</b> 52:17 <b>mentioned</b> 7:20 20:18 22:12 49:3 51:8 54:24 63:3 <b>merely</b> 107:8 <b>merge</b> 148:24 <b>messing</b> 43:3 113:1 <b>met</b> 19:3 <b>metadata</b> 172:11 <b>method</b> 97:25 144:3 <b>methodologies</b> 48:9,17 <b>methodology</b> 48:6 96:25 97:9 147:8 <b>methods</b> 37:10 52:9 <b>metrics</b> 87:22 <b>michael</b> 82:10 <b>microphone</b> 139:20 <b>mid</b> 80:15,18 <b>middle</b> 12:16 13:19 59:2 134:15 135:7 150:18 156:13 <b>mike</b> 52:6	<b>mind</b> 5:21 85:22 123:4,6,7 125:16 128:5 144:3 <b>mine</b> 9:6 147:16 <b>minor</b> 113:13 114:9 <b>minorities</b> 57:17 <b>minute</b> 20:18,19 108:5 153:6 171:14 <b>minutes</b> 24:17 151:13 <b>mischaracterizing</b> 161:8 <b>misread</b> 54:19 <b>mistake</b> 62:25 69:24 <b>misunderstanding</b> 173:1 <b>mode</b> 137:14 <b>model</b> 35:21 152:22 153:13,21 153:22 161:7,10 162:11 163:12 165:2 <b>modeling</b> 35:12 <b>models</b> 35:14 39:10,12 124:20 153:23 <b>moment</b> 12:25 13:17 18:23 19:14 21:6 126:8 137:16 145:20 <b>monday</b> 172:6 <b>money</b> 105:23 <b>monitor</b> 4:2 94:6 126:17,21 151:16 151:19 171:18,22 176:4 <b>monte</b> 43:13 48:20 52:20 53:8 90:6	127:6 <b>month</b> 29:8 <b>months</b> 154:8 <b>morning</b> 5:19,20 38:1 <b>motion</b> 73:19 156:14,19,21 158:19 <b>mouth</b> 139:20 <b>move</b> 25:17 28:24 93:22 152:8 173:8 <b>moved</b> 153:14 <b>movement</b> 158:2 <b>movements</b> 162:18 165:5 167:17 <b>moving</b> 110:22 114:21 127:1 <b>mtd</b> 156:6 180:24 <b>multiple</b> 65:11 143:12 <b>murphy</b> 2:24 4:18 156:16 <b>myriads</b> 72:2
			<b>n</b>
			<b>n</b> 26:10,11 87:9 179:1 <b>naacp</b> 1:4 2:2,14 2:18 4:6 5:4 64:22 65:1,9 66:11 72:20 139:2 152:5 180:7,21 181:4 182:1 183:1 <b>naacpldf.org</b> 2:17 2:22 <b>name</b> 5:21 21:14 26:9 28:9,13,22 53:12 58:16 62:3 63:19 66:21 <b>named</b> 82:10

[names - ohio]

Page 19

<b>names</b> 17:25 25:19 <b>narrowly</b> 76:8 <b>nassau</b> 149:1 <b>national</b> 90:16,23 180:16 <b>natural</b> 102:10 103:17 <b>naturally</b> 75:16 <b>nature</b> 16:9 22:24 <b>near</b> 118:16,23 120:3,5 121:7,10 121:15 141:20,25 142:2 <b>nearly</b> 38:2 <b>necessarily</b> 34:9 114:16,18 <b>necessary</b> 183:6 <b>need</b> 6:17 8:16 41:9 86:12 153:13 166:21 167:22 176:6 177:10,14 <b>needed</b> 169:3 172:9,10,16 <b>needs</b> 36:12 43:22 44:8,10,15 176:22 <b>nefarious</b> 125:17 <b>negative</b> 101:16 <b>neighboring</b> 155:21 157:16 158:11,15,21 160:8 <b>neither</b> 178:8 <b>nested</b> 35:11 <b>neutral</b> 161:13 <b>never</b> 20:8 46:8 53:21 78:14,15,20 88:4 89:20 138:17 <b>new</b> 2:12,12,16,16 50:23 57:13,25 58:4,7,19 59:10	59:14,21,25 60:3 60:3,9,21 61:3 64:7 79:25 80:6 81:2 92:6 97:6 126:8,10 142:5,12 143:13 144:8,11 147:24 148:7,22 149:11 150:11 155:21 157:15 158:11,15,21 160:7 163:15 165:6 180:1,5 <b>newborn</b> 115:20 115:23 116:1 <b>newly</b> 96:4 162:19 163:1,23 <b>nexsen</b> 2:24 17:22 18:18 19:19 23:20 25:6,16 <b>nexsenpruet.com</b> 3:4,5 181:2 <b>nickel</b> 74:4 75:4 <b>night</b> 17:3,4 41:15 41:17,25 42:3,7 44:1 <b>nightmare</b> 61:13 79:22 <b>nine</b> 105:25 106:8 135:7 136:13 154:4 <b>nod</b> 6:21 <b>noise</b> 7:22 <b>non</b> 71:25 86:7 101:25 <b>noncompliant</b> 82:21,23 83:1 168:20 <b>nope</b> 29:15 <b>north</b> 62:19 64:11 65:10,12 66:11 67:23 74:12,21	114:4 <b>notary</b> 178:4 183:13,19 <b>note</b> 62:8 66:18 78:13 133:22 134:17 161:6 173:5 181:10 <b>noted</b> 183:7 <b>notes</b> 15:19 <b>notice</b> 12:4,19,22 179:17 <b>noticed</b> 24:8 <b>number</b> 98:20 99:2,4,22 103:6 103:22 117:15,16 117:17,18,20 121:24 129:6 130:9 145:11 160:15 <b>numbered</b> 104:12 <b>numbers</b> 38:14 99:7,12,16 104:3 104:18,22 105:17 115:24 117:7,11 117:12,21 118:2 130:1,13,17 137:4 146:20 <b>numeric</b> 131:11 131:17 <b>nw</b> 2:6 3:10	<b>obligations</b> 63:18 173:6 <b>observer</b> 122:14 <b>obtained</b> 72:20 <b>obvious</b> 141:3,5 163:10 <b>obviously</b> 21:10 51:1 52:18 141:24 155:7 <b>oc.edu</b> 26:12 <b>occ</b> 128:4 <b>occasionally</b> 26:6 <b>occur</b> 118:13,23 120:5,7 <b>offer</b> 68:3 87:6,8 87:19 88:12 97:8 155:10 <b>offered</b> 68:10,16 68:20 69:3,4,7 81:16 84:21 92:6 <b>offering</b> 166:12,15 <b>offers</b> 71:23 <b>official</b> 178:12 <b>officially</b> 98:4 <b>officials</b> 10:16 <b>oh</b> 17:2 20:12 21:25 23:9 43:7 53:23 56:4 62:13 75:24 80:5 101:13 102:18 105:21 110:10 118:24 125:5 129:9 133:24 134:4 139:11 141:3 148:17 153:18 154:1 176:10 <b>ohio</b> 1:15 25:25 31:11 38:9 70:6 70:11 73:4,12 74:11,20 77:5,5 79:3,10 80:23
--	--	--	---

[ohio - p.m.]

Page 20

81:7 83:4,8 84:1 86:22,25 89:7 179:24 180:8,14 180:14 <b>ohio's</b> 89:11,13 90:2,8 <b>okay</b> 6:6 7:11,13 8:4,16,23 9:4,12 9:14,22 10:2,13 11:23,25 12:7,18 12:21,24 13:7,18 14:12 16:25 19:3 19:15 20:17 21:6 21:24 22:3,7 23:12,14 27:5 28:24 29:22 31:21 32:17 33:17,25 34:13,19,24 35:9 35:15 36:7,22 37:24 41:1,19 42:18 43:23 44:13 45:6,23 48:25 50:8 51:12 52:2 55:14 58:18 59:13 59:21 60:7,15 62:11,15 63:1,9 63:24 64:5,25 65:19 66:6,13 70:10,25 71:5,14 71:18 72:6,13 73:11,14 74:3,18 75:17,23 76:10,14 77:8 79:2,13 80:19 81:3,24 82:2,5,12,19 85:6 88:6 90:3 91:4,7 91:14,23,23 93:1 93:21 94:12,17,20 95:9,13,22 96:17 98:5,8,19,25 99:9 100:24 101:2,15	105:4,25 106:7,8 106:16 107:17 108:4,19 109:1,6 109:10,13,17 110:11,18,22 111:7,10 113:2,3 113:8,8,22 114:21 115:8,13,19 117:4 117:19 118:3,6 119:25 120:25 121:8,12,17,23 123:9,9 124:15,19 125:7,22 126:15 127:1 129:10,24 131:8,16,22,25 132:4,21 133:2,2 133:17,24 134:6,6 134:10,13 135:5,9 135:21 136:19 137:16,19 138:1,2 138:11,18,18 139:13,19,24 140:1,6,9,13,18 140:22 141:7,19 142:4,9,11,14,15 144:11 145:10 147:17,23 148:5 149:9 150:4,10,16 150:24 151:10 152:16,22 153:6 153:23 154:3,11 154:14,20,25 155:3,12,16 156:2 156:9,10,12,18,22 157:14 158:9 160:6,19,22 161:1 161:5,5,17 162:3 162:8,8,17,25 164:2 165:9,9 166:12,15 167:15 168:14 169:9,14	170:20 171:16 173:8,17,21 175:1 175:14 176:17,20 176:23 177:2,11 177:16 <b>old</b> 22:19 28:9 156:21 <b>oldest</b> 43:21 <b>omit</b> 174:23 <b>once</b> 57:6 91:10 104:20 105:9 118:2 <b>ones</b> 26:18,20 99:18 110:7 164:23 <b>online</b> 47:9 52:14 <b>open</b> 21:23 22:1 78:6 133:18 153:4 162:1 171:6,12 172:18 <b>opine</b> 87:4 96:7 <b>opinion</b> 58:4 65:20,22 66:4,5 66:10,14,16 67:5 67:10 68:10 69:9 69:12 71:1,21 72:7 73:11 74:23 75:1,6 76:11,15 77:17,23 79:15 80:12 81:4,25 83:7 84:14 86:5 88:5 89:6,24 90:20 92:15 146:21 147:5,15 147:23 148:7 150:11 166:12,15 180:6 <b>opinions</b> 70:16 74:15,18 175:2,7 175:9	<b>opportunistic</b> 149:17,22 150:3 <b>opportunity</b> 88:10 103:19 <b>opposite</b> 153:19 157:16 <b>orangeburg</b> 138:6 138:10,13,19,19 140:1 <b>oranges</b> 163:11 <b>order</b> 37:19 64:19 73:10,19 167:6 <b>ordered</b> 174:8 <b>organize</b> 67:2,16 68:7 <b>organizing</b> 38:9 70:6 73:4,12 79:3 81:7 179:24 180:8 <b>original</b> 79:9 86:4 86:5 <b>osaki</b> 2:10 5:9,9 <b>osu</b> 26:25 27:9,11 46:6 <b>outlook</b> 26:5 94:19 <b>output</b> 99:5 <b>outputs</b> 121:10 <b>outside</b> 93:2 131:4 134:11 136:23 137:17 138:25 139:3,5 141:9 150:7 <b>overall</b> 92:8 115:10 119:3 <b>overseas</b> 42:14 <b>overseeing</b> 31:12 <b>oversight</b> 62:19
<b>p</b>			
<b>p</b> 13:21 26:14 59:3 <b>p.m.</b> 126:18,21 151:16,19 171:18			

[p.m. - phrase]

Page 21

171:22 176:4 177:20 <b>package</b> 49:7,15 50:2 52:11 53:9 53:12,18 54:4,5 54:25 55:3 97:15 119:6 <b>packed</b> 75:14 <b>packing</b> 75:12 <b>page</b> 12:16 13:19 13:23 36:7 46:3 59:5 65:5 66:14 69:11 85:7,7 95:6 98:8 105:25 106:8 109:17,18 110:22 115:9 117:14,15 117:16,18 120:10 120:20 123:9 125:4 127:1 133:4 133:6,8,8 134:6 138:2,4,12,13 140:6,18 141:8 142:14 150:18 152:10 153:12 154:4,16 155:4,16 156:25 162:3 165:10 179:3,15 182:4,7,10,13,16 182:19 <b>pager</b> 43:2 <b>pages</b> 14:4 45:21 65:23 153:9 <b>pairing</b> 125:8 <b>panhandle</b> 124:10 <b>paper</b> 22:4,5 29:19 31:18 35:8 38:20,21,25 40:12 40:15 44:13 52:19 56:5,12 97:24 98:2 123:21	<b>papers</b> 33:15 43:9 97:19 98:6,7 <b>paragraph</b> 16:6 65:8 71:14 74:9 106:9 118:7 119:2 125:3,4,7 138:16 155:16 161:6,14 161:23 165:10 166:16 <b>paragraphs</b> 162:4 162:7 <b>parameter</b> 112:7 112:10,17,18 122:21 123:4,4 128:6 145:1,4 159:20 <b>parameters</b> 111:24 112:12 113:5 119:7,22 120:16 123:2,7 127:19 <b>parens</b> 96:9 <b>parentheticals</b> 96:12 <b>parents</b> 43:19 <b>part</b> 14:9,10 35:24 36:3,6 40:2 52:8 66:25 67:7,8,14 67:17,20 68:1,10 71:18 72:15 73:15 73:22 75:23,25 78:19 82:2,12,19 84:5,8,13,19 86:2 87:5 88:7 92:1 98:13 116:13 153:9 155:13 156:11 <b>particular</b> 41:8 54:16,17 56:23 86:10 92:20 96:6 166:5,19 168:1	<b>particularly</b> 67:25 87:22 89:12 148:16 <b>particulars</b> 56:24 <b>parties</b> 18:13 <b>partisan</b> 30:12 32:13 45:11 87:7 87:20,21 132:5,24 143:2,17 <b>partisans</b> 75:10,13 <b>partisanship</b> 132:18 143:14 144:23,25 145:7 145:14 146:9 <b>party</b> 70:12 91:3 143:9 169:1 178:9 <b>party's</b> 174:14 <b>passed</b> 11:8,15 168:10 <b>passing</b> 22:13 <b>path</b> 125:10,13 <b>patricia</b> 2:5 5:1 <b>patrick</b> 5:23 <b>patterns</b> 92:5 <b>pause</b> 106:12 126:15 <b>pd</b> 114:21,22,23 115:8 140:6,11 <b>pdf</b> 39:20 40:21 <b>pdfs</b> 39:18 <b>peak</b> 118:16,23 120:3,8,13 121:7 <b>peaks</b> 118:12,13 120:6 <b>peer</b> 46:9,13 47:14 78:5,14,15,21,24 97:19 98:3,6,7 123:21 124:19 <b>pending</b> 79:9,20 80:22 178:10	<b>people</b> 18:9 23:16 27:1 33:12 56:21 81:9 114:17 116:12 119:4,12 122:20 128:4 146:11 147:12 <b>percent</b> 120:12,13 120:14,21,23 121:2,5,7,9,20,21 129:12,13 134:19 134:24 135:3,7,15 135:15 136:12,13 139:23 142:17,19 164:22 169:2,6 <b>perfect</b> 162:8 <b>perfectly</b> 88:5 115:9 <b>perform</b> 130:25 <b>permit</b> 69:19 <b>permits</b> 69:24 <b>persist</b> 123:10 <b>persists</b> 124:4,21 <b>person</b> 7:1 18:9 20:7 31:14 82:10 114:8 159:7 <b>personal</b> 25:18 28:4,8 124:16,17 <b>perspective</b> 122:17 <b>persuaded</b> 41:12 133:1 <b>petitions</b> 150:25 <b>ph</b> 17:9 128:4 <b>ph.d.</b> 29:1,5,23 46:6 50:11 52:9 78:4 <b>phone</b> 19:8,20 20:9,14,21 24:18 <b>phrase</b> 75:19 78:18
--	--	---	---

[phrased - probably]

Page 22

<p><b>phrased</b> 7:15</p> <p><b>picked</b> 165:5</p> <p><b>picture</b> 83:24</p> <p><b>pictures</b> 113:16 123:24</p> <p><b>piece</b> 42:25 44:24 84:21 92:14</p> <p><b>pieces</b> 34:13 96:1</p> <p><b>places</b> 168:25</p> <p><b>plaintiff</b> 1:16 2:1</p> <p><b>plaintiff's</b> 57:7 73:19 96:4 131:18 156:14 171:9 172:4,13 173:14</p> <p><b>plaintiffs</b> 1:5 4:15 5:2,4,8,10 10:22 15:6,8 21:12 24:8 27:14 57:16 63:12 73:8 84:22 116:17 122:3,4 130:14 171:5 177:3</p> <p><b>plan</b> 57:14,15 81:12 82:15,24 84:3 85:11,13,14 86:7,8,23 87:11 87:16,25 88:20 89:2,3,4,7 121:9 135:12,25 136:3,6 136:22,24 137:1 137:15,17 139:2,3 139:5 140:3,10 141:8,10 144:17 162:19,20 163:2 163:13,14 164:4,6 168:2</p> <p><b>plans</b> 82:15,18,20 82:22 83:18 84:1 85:25 88:25 114:19 120:22 130:24 136:5</p>	<p><b>platform</b> 49:14,19</p> <p><b>play</b> 146:22</p> <p><b>played</b> 146:15 163:7</p> <p><b>please</b> 4:10 5:22 13:20 72:18 86:13 86:17 102:23,23 176:7</p> <p><b>point</b> 8:17 9:14 24:11 38:15 45:7 62:8 83:17 88:15 93:5 100:4,8,10 100:10,16 101:17 101:21 102:2,3,14 102:18,19,24 103:2 109:13 114:14,15 115:13 116:9 120:1,21 131:7 139:1 143:19 145:5 161:21 172:25</p> <p><b>pointed</b> 82:17 93:2 120:19</p> <p><b>points</b> 172:1</p> <p><b>polarization</b> 21:15</p> <p><b>polarized</b> 92:11 92:13,22 93:14,14 154:19 166:19,25</p> <p><b>political</b> 29:1 30:10 32:23 35:14 62:19 75:7 79:4 143:7,9 146:9 151:2 157:3,11,20</p> <p><b>politics</b> 129:17,20 148:22</p> <p><b>politics.com.</b> 26:15</p> <p><b>polsby</b> 123:6 128:5</p> <p><b>popper</b> 123:6 128:5</p>	<p><b>population</b> 72:1</p> <p><b>posed</b> 170:22</p> <p><b>posit</b> 128:9</p> <p><b>position</b> 171:9,12 173:10</p> <p><b>positioning</b> 130:5</p> <p><b>positive</b> 51:22 56:2</p> <p><b>possibility</b> 78:6 157:25</p> <p><b>possible</b> 87:10,15 87:24 88:19,24 89:11,19,24 105:11 118:14 120:15 141:24 158:4 159:8,14 165:2,8 172:10</p> <p><b>possibly</b> 89:15,17</p> <p><b>potential</b> 10:15,21 161:7,9</p> <p><b>power</b> 43:14 84:1</p> <p><b>practice</b> 175:2,8</p> <p><b>practicing</b> 147:19</p> <p><b>precinct</b> 65:14 69:19,24 91:2 107:12,12,18,18 157:4</p> <p><b>precincts</b> 69:21 72:1 118:15 149:2 152:20 162:9</p> <p><b>precise</b> 33:14 49:19 129:5</p> <p><b>predominate</b> 127:24</p> <p><b>predominated</b> 127:21</p> <p><b>prefer</b> 55:10,13 111:16,24 112:8</p> <p><b>preference</b> 112:3 119:17</p>	<p><b>preferences</b> 113:2</p> <p><b>prefers</b> 111:13,21 112:11</p> <p><b>prepare</b> 24:11</p> <p><b>prepared</b> 174:10</p> <p><b>present</b> 3:19 32:20 32:25 67:2,16 68:7 164:5,17</p> <p><b>presented</b> 46:18</p> <p><b>preserve</b> 158:23 158:25 159:1,13</p> <p><b>preserving</b> 157:3 157:11</p> <p><b>presidential</b> 76:8</p> <p><b>presumably</b> 153:22</p> <p><b>pretty</b> 43:14 63:7 91:9 144:1 149:2 163:10</p> <p><b>prevent</b> 6:3 68:7</p> <p><b>previous</b> 93:16 162:19 165:6 174:17 175:18</p> <p><b>previously</b> 133:20 163:13,18 164:1,4 164:6,15</p> <p><b>primarily</b> 50:1</p> <p><b>print</b> 47:11</p> <p><b>prior</b> 169:20 175:21</p> <p><b>prioritized</b> 157:2</p> <p><b>privileged</b> 16:16 17:19 18:19</p> <p><b>pro</b> 82:18,23 83:12,13,19,20 86:1</p> <p><b>probability</b> 10:8 125:6 142:24</p> <p><b>probably</b> 19:25 20:13 22:9 23:22 24:2 28:11 29:21</p>
--	--	--	---



[probably - race]

Page 23

32:3 45:22 56:17 60:13,21 66:2 71:4 112:14,16,20 123:7 124:11 133:12 138:16 173:22 <b>probative</b> 93:3,6 93:11 <b>problem</b> 52:10 133:14 163:10 <b>procedure</b> 173:23 173:25 <b>proceed</b> 171:14 <b>process</b> 81:22 102:6 104:6 109:12 111:13 <b>produce</b> 15:8 16:8 16:10 54:10 98:25 99:5,9,16,22 102:7,25 103:1,21 104:9 105:15 109:4,6 110:8 117:4 120:17 130:13,16 131:16 133:5 135:10 136:2 <b>produced</b> 15:6 89:22 99:3,12,19 99:23 100:8 101:7 103:14 104:12,22 108:25 109:22 111:7 112:12 127:8 138:10 164:1 168:24 <b>produces</b> 100:5,17 101:22 103:15 109:20 136:5 <b>producing</b> 131:25 <b>professional</b> 124:23	<b>professionally</b> 124:9 <b>program</b> 46:6 49:3,14,14,16,21 49:24 52:20 54:25 55:6 56:21 <b>programmed</b> 122:22 150:2 <b>programming</b> 55:3,3 <b>programs</b> 169:23 <b>prohibited</b> 155:4 <b>project</b> 33:13 34:11 <b>prong</b> 65:16 <b>pronouns</b> 58:16 <b>properly</b> 146:23 147:1,9 151:8 154:24 <b>property</b> 146:14 <b>proportion</b> 120:7 <b>proposed</b> 127:5 <b>protected</b> 64:15 <b>protection</b> 154:13 <b>protective</b> 64:18 <b>protrusion</b> 114:4 <b>prove</b> 125:20 <b>provide</b> 96:15 107:17 174:12 <b>provided</b> 127:4 <b>pruet</b> 2:24 17:22 18:18 19:20 23:20 25:6,16 <b>prying</b> 112:18 <b>public</b> 56:18 178:4 183:19 <b>publically</b> 16:8 17:8 <b>published</b> 47:9 97:19,24 98:4	<b>pull</b> 12:7 13:16 34:23 58:21 65:5 66:6 70:13 95:3 142:6 152:16,23 153:1 156:9 <b>pulled</b> 105:10 112:5 142:12 <b>pulling</b> 37:24 91:23 <b>purport</b> 125:21,24 <b>purports</b> 75:12 <b>purpose</b> 125:17 126:2 <b>purposefully</b> 165:12 <b>purposely</b> 167:5 170:4,9 <b>purposes</b> 40:21,25 41:3 <b>put</b> 51:7 52:14 63:25 70:3 72:10 76:22 81:3,20 100:20 118:25 119:1 131:10 143:5 149:16 153:19,20 160:15 165:24 171:8,12 172:3,18 173:10 <b>putting</b> 90:11 133:18 165:21 170:23 <b>pyan</b> 2:8 <b>q</b> <b>qualifications</b> 78:1 <b>qualified</b> 67:2,16 68:6,13,25 97:10 97:12,16 <b>quantitative</b> 47:17 47:19 76:4	<b>question</b> 7:1,14,16 8:18 9:9,15 17:11 43:17 49:1 54:3 84:4,11,13,18 86:4,6 89:1 111:19 115:10 121:12,23 127:16 127:23 129:12,13 150:5 168:17 170:22 <b>questioning</b> 171:15 <b>questions</b> 6:4,11 6:11,19 7:3,9 8:19 9:6 30:10 32:24 38:3 52:7,12 93:7 147:21 164:25 170:21 172:1 175:25 <b>quibble</b> 121:14 <b>quick</b> 58:14 126:15 171:14 <b>quicker</b> 63:16 <b>quickly</b> 65:5 <b>quote</b> 30:8 32:11 70:15,20 72:7 79:9 96:12,13 134:18 135:10 140:23 151:5 167:5 170:4 <b>r</b> <b>r</b> 25:24,24,24,24 26:11,14,14,14 49:4,9,10,12,14 49:16,18,25 55:13 56:7 87:9 96:8 98:24 99:6 182:3 182:3 <b>race</b> 57:23 127:23 128:1 129:21,22 132:17 146:8,14
---	--	--	--

[race - redist]

Page 24

146:15 147:10 161:11,13 162:14 163:2,4,7,9,14 164:4,5,6,7,12,15 164:16,17,18 165:3,6,12 166:21 167:6,22 169:5 170:5,10 <b>raced</b> 165:6 <b>races</b> 146:22 <b>racial</b> 10:14,18,20 21:15 35:16,25 36:2,25 51:4,14 57:17,19 92:5,10 118:15,23 120:3,5 120:7 127:22 132:8,23 145:22 146:4 151:7 154:9 154:18,19 166:19 <b>racially</b> 93:13 166:25 <b>radically</b> 102:11 114:16 <b>raffensperger</b> 77:3,9,13 180:12 <b>ragusa</b> 21:13 39:13 48:10,24 96:8,11 152:3 158:1 160:23 162:18 169:23 180:20 <b>ragusa's</b> 55:18 152:10,12 155:13 155:17 157:24 158:9,14 161:2,7 161:10 162:10 165:2 <b>raised</b> 146:13 147:12 <b>raising</b> 161:9	<b>ran</b> 37:7 98:23 100:11 130:1 144:16 162:10 165:2 <b>random</b> 98:20 99:2,4,22 101:4 101:19 103:5 104:8,10 106:11 106:17 108:6 110:2 117:20 118:2 164:21 <b>randomly</b> 109:19 120:14 122:20 <b>randomness</b> 119:11 <b>range</b> 20:17 <b>rankin</b> 3:7 4:25 <b>rarely</b> 123:18 <b>rational</b> 146:2 <b>rcp</b> 28:20 <b>reach</b> 150:19 <b>read</b> 12:15 13:18 15:15 21:12 53:16 59:1 65:8,22,25 66:24 69:15,16 71:3,5,18 72:18 73:17 74:18,23 75:23,25 76:10 77:19 81:24 82:2 82:12,19 84:5 85:8,21 87:5 92:1 96:1 118:17,20 142:21 143:3 146:21 148:4 150:11 157:1 158:18 161:22 173:25 174:7 176:7,14,15 177:18 181:9 183:5	<b>readable</b> 150:17 <b>reader</b> 103:3,13 155:10 <b>reading</b> 83:10 85:15 174:22 176:11 <b>ready</b> 94:10 <b>reagan</b> 90:17,23 91:7 180:17 <b>real</b> 7:24 58:14 <b>realclearpolitics</b> 26:13,24 27:4,12 28:10 46:24 47:6 48:1 50:15 <b>realize</b> 9:22 <b>realized</b> 36:19 <b>really</b> 35:23 54:7 114:20 116:5,9 148:20 149:7 151:11 <b>rear</b> 3:22 <b>reason</b> 7:16 8:17 41:9 109:6 140:4 141:15 143:14 146:25 147:8 150:13 164:3 181:11 182:6,9,12 182:15,18,21 <b>reasonable</b> 103:13 114:8 <b>reasonably</b> 125:16 <b>reasons</b> 133:19 <b>rebut</b> 88:4,9,16 90:12 <b>rebuttal</b> 13:21 90:10 123:24 145:19 <b>rebutted</b> 90:13 <b>rebutting</b> 87:8,23 153:8,10	<b>recall</b> 23:15 78:8 78:10 81:11 <b>receipt</b> 181:18 <b>receive</b> 10:24 29:5 29:22 172:11 <b>received</b> 24:24 34:20 37:25 61:9 95:17 <b>recess</b> 94:4 126:19 151:17 171:20 <b>recitation</b> 173:5 <b>recognize</b> 12:13 12:25 13:18,24 35:5 59:10 95:6 <b>recollection</b> 15:7 33:23 70:24 117:25 <b>record</b> 4:2 5:22 6:20 7:25 9:11 21:25 34:20 37:25 38:12 94:2,3,7,10 94:12,21 126:17 126:18,21 133:18 133:20,23 151:16 151:19 170:23 171:9,13,18,19,22 172:2,3,19 173:10 174:7 176:3 178:7 <b>recorded</b> 4:4 6:12 71:21 <b>recreate</b> 104:7 105:11,20 <b>recreating</b> 105:23 <b>recreation</b> 36:15 <b>rector</b> 2:16 <b>red</b> 134:15 135:6 <b>redist</b> 47:25 49:3,6 49:13,15 50:2,4,8 51:4,15 52:3,22 58:4 97:15 180:5
--	---	---	--



[redistricting - reproduce]

Page 25

<b>redistricting</b> 10:9 10:17 30:11 32:12 35:19 36:23 37:22 38:25 45:10 46:14 46:19 47:4 49:7 51:19 52:18 57:14 57:15 58:8 74:11 77:5 89:5,13 97:19 114:19,19 123:25 162:14 166:7 180:15 <b>redone</b> 36:12,21 44:15,24 <b>redrawn</b> 153:14 <b>reduce</b> 156:3 <b>reducing</b> 158:3 <b>refer</b> 11:13,21 14:7 32:9 33:12 49:13 95:11 129:18 <b>reference</b> 16:7 <b>referenced</b> 15:5 16:1 17:6,10 21:10 82:3 181:6 <b>references</b> 66:20 <b>referred</b> 124:13 <b>referring</b> 85:25 96:10 <b>refused</b> 70:16 <b>refusing</b> 41:5 <b>regarding</b> 13:8 46:13,19 96:4 <b>regional</b> 39:3 <b>registration</b> 36:17 68:4 <b>regression</b> 47:21 152:19 <b>regularly</b> 174:14 <b>rejected</b> 77:13 <b>related</b> 27:16 72:2 172:12 178:9	<b>relates</b> 11:5 <b>relating</b> 65:18 <b>relative</b> 127:8 130:5,18,18,20,25 <b>relatively</b> 71:24 <b>relay</b> 88:2 <b>relevant</b> 83:15,18 84:7,11,18 85:2,5 93:13,13,17 125:1 131:19,24 132:2 <b>reliability</b> 72:23 <b>reliance</b> 145:13 <b>reliant</b> 143:7 <b>relied</b> 15:9 17:6,12 17:13,14 21:7 27:13 97:25,25 109:9 <b>rely</b> 15:3,13 22:6 <b>relying</b> 107:22 <b>remaining</b> 29:19 <b>remember</b> 9:15 21:14 42:23 56:22 58:16 59:17 61:22 65:3 73:9,11 74:6 77:10,25 80:7 90:22 103:24 109:1 153:17 156:21 163:22 <b>remembered</b> 78:6 <b>remotely</b> 4:8 137:13 <b>render</b> 132:18 <b>rendered</b> 77:23 <b>rendering</b> 113:13 <b>reopen</b> 106:6 <b>repeat</b> 7:17 96:22 <b>repeated</b> 115:25 <b>repetitions</b> 119:19 <b>rephrase</b> 100:22 128:25	<b>replicate</b> 53:25 104:10,11,15 <b>replicated</b> 56:7 <b>replicating</b> 154:24 <b>replication</b> 56:3 <b>reply</b> 88:10 <b>report</b> 11:13,22 13:13,21 14:3,10 14:15 15:1,4,5,9 15:17,20,23 16:2 17:6,11,12,15,16 17:21,24 21:7,9 21:11,23 24:14 29:4 30:8 32:11 37:8,11 39:10,13 48:7,18 49:4 50:21,22,22,23 51:16,25 52:23 55:16 56:13 57:25 58:11,13,19 59:3 59:14,18,22 60:1 60:4,5,8,9 61:4,9 61:15,18,20,25 62:8 63:5,10,25 65:6 68:13,21,25 70:3,14,20 72:10 73:1,5,20,23 74:8 74:15 76:24 77:12 79:7,8 80:20 81:5 81:19 87:17 88:2 88:13,21 90:10,21 91:20 92:15,16 94:25 95:7,14,17 95:17,22,24,25 96:7,9,11,11,25 97:21 98:9 99:15 100:2,15,20 101:4 101:11,12,20,24 102:1,3,5,17 103:4,8,9,16,23 104:3,6,19 105:14	105:17 106:1,4 107:21 108:9,20 110:5,8 111:2,15 113:11 118:6 123:10 126:8,10 126:12 127:2 129:24 130:6,9 131:10,14 132:22 133:4 138:5 140:9 142:5,11 145:19 151:25 152:3,9,10 152:12,13,15 153:1,10 155:3,14 161:6,15 165:10 165:16 166:2 167:2 174:3,10,15 179:18 180:2,18 180:20 <b>reported</b> 1:17 76:4 <b>reporter</b> 4:11 5:11 5:13 6:12,18,20 6:24 55:21 86:12 86:16,20 139:15 139:17 176:6,10 176:17,20 177:2,6 177:11,16 178:1,3 178:24 179:10 <b>reports</b> 21:11,13 50:18 51:3 57:1 61:22 62:7,14,21 64:7,9 65:9 74:10 94:15 96:3 <b>representations</b> 172:17 <b>representative</b> 81:12,23 <b>representatives</b> 11:17 96:6 <b>reproduce</b> 104:5 105:2 117:8
--	--	--	---

[reproduce - roughly]

Page 26

131:20 <b>reproduction</b> 138:13 <b>republican</b> 76:7,9 83:12,19 84:3 87:12 149:1 <b>request</b> 42:10,17 172:10,11 173:7 <b>requested</b> 24:1 94:16 179:12,13 <b>requests</b> 173:4 175:10 <b>require</b> 43:13 148:24 175:20 <b>required</b> 72:3 167:9,17 174:2 183:13 <b>requires</b> 8:8 41:7 165:18 167:11 170:15 <b>requisite</b> 160:15 <b>rerunning</b> 45:5 <b>respect</b> 96:18 98:9 150:6 154:15 163:9 165:12 167:1,5 169:5,12 170:5,10 172:14 174:1 175:6,17 <b>respond</b> 94:17 152:1 <b>responded</b> 94:22 <b>responding</b> 153:16 <b>response</b> 58:23 152:17,18 <b>responses</b> 6:18 <b>responsible</b> 50:1 128:7 <b>rest</b> 7:3 11:20 <b>result</b> 101:3 112:14,16,17	125:9 <b>resulting</b> 54:4 99:1 <b>results</b> 99:22 101:19 102:17 127:13 161:11 163:8 164:23 165:5 <b>retained</b> 174:12 <b>retention</b> 125:11 125:12 <b>return</b> 172:8 181:13,17 <b>returned</b> 161:10 <b>reveal</b> 18:19 <b>revealing</b> 16:15 17:19 <b>review</b> 21:8 34:22 38:2 46:9 52:18 78:15 96:3 98:3 155:6 171:7 181:7 <b>reviewed</b> 24:14 47:14 78:5,14,21 78:24 95:9 97:19 98:6,7 123:21 124:19 <b>richland</b> 113:9,11 113:12,17,23 140:19,22 <b>ridiculous</b> 126:14 <b>right</b> 6:8 7:6,18 8:10 13:5,23 14:16 19:2 20:12 20:15,16 21:17 27:24 28:20 29:2 29:6 30:3,13,17 30:20,23 32:14,15 32:18,19,22 33:17 34:14,15,18 36:2 36:5,10 37:8,12 39:8,11,14 44:20	46:1 47:4,7 48:13 48:14 49:4,5,24 50:3 52:16,21 54:11,24 56:25 57:2,7,8 59:7 60:10 64:9,19 66:13 67:5 69:2 72:8,9 73:3,5 74:12,13,16 75:21 76:16 77:14 78:13 79:5,6,11,12,14 80:4,5,20,24 81:9 82:10 85:21 87:16 91:6,7,9,17 96:2 96:23 97:15 98:3 98:11,12,15,16 99:17,18 100:6,12 100:13,18,25 101:1,21 102:18 105:6 106:23 108:2,3,21 109:25 110:1,14 111:3,9 113:14,15 114:14 114:24 115:2,11 115:15,20,21 116:5,16,19,22 117:13,14 118:10 118:11,17 120:8 120:19 122:2 123:12,15 125:10 125:19,23 128:12 128:15 129:3 130:2,3,8,11,12 131:13 132:9,10 132:24 134:11,20 134:21,25 135:1 135:12,13 136:21 137:3,22 138:22 139:10 140:7,8,12 140:17,24 141:14 142:21 143:4,9,10	143:16,20 144:10 144:13,19 145:9 145:15,24 147:24 147:25 148:3,9 150:8,9,21 151:2 151:3 153:11,19 155:18,19 156:1,4 156:23 157:12,18 157:19 158:12,13 158:16,17 159:3,7 159:15,18,19,21 161:4,13,25 162:11,12,16,20 162:22 163:4,11 163:15,19,20,25 164:14,18 165:13 165:16,19,23 167:14 168:7,8,11 168:24 169:13,17 169:21 170:16,19 171:23 174:6 175:11,15,16,21 176:3,15 177:18 177:19 <b>rights</b> 46:16,21 57:1 65:17 67:22 68:5,8,10,15,17 68:23 69:4,7 166:6 <b>rmg</b> 1:6 <b>rodden</b> 87:18 90:6 <b>rodden's</b> 88:17 89:12 <b>roddens</b> 87:9 <b>room</b> 4:19 <b>roosevelt</b> 3:20 <b>rough</b> 177:1,4,14 177:14 <b>roughly</b> 106:13 135:17
---	---	---	--

[round - september]

Page 27

<b>round</b> 80:1 <b>rounds</b> 81:1,2 <b>routinely</b> 123:24 <b>row</b> 76:14,19 <b>rucho</b> 58:2 180:4 <b>rule</b> 41:7 67:6 173:25 174:7,22 174:24 175:19 <b>rules</b> 6:7 8:23 159:7 173:23 <b>run</b> 45:23 49:7 56:7 97:13,17 107:24 163:5 <b>runs</b> 49:14	<b>san</b> 17:9 <b>saturday</b> 43:20 <b>saw</b> 69:6 89:20 162:13 <b>saying</b> 16:5 37:25 41:1 101:10 103:15 119:2,20 132:22 136:22 138:11,24 139:23 147:13 149:5 153:24 154:1,2 158:19 160:5 <b>says</b> 29:4 37:19 44:14 59:19 67:15 68:19 84:24 92:20 93:4 103:14 113:11 143:5 148:1 150:18 156:14 158:23 174:8 <b>scale</b> 19:9 <b>sceptical</b> 149:2 <b>schedule</b> 22:17 29:20 <b>scheduled</b> 22:18 29:14 <b>scheduling</b> 22:20 <b>scholarship</b> 123:14 <b>school</b> 43:21 44:8 44:10 51:19 56:18 <b>science</b> 29:1 35:14 <b>scope</b> 175:7,9,9 <b>screen</b> 12:8 14:11 38:16 95:12 174:5 <b>scroll</b> 13:25 36:7 85:16 153:2 154:11 <b>scrolling</b> 59:1,9 95:23 153:8 156:12,25	<b>seal</b> 178:12 <b>sean</b> 1:11 4:5 5:15 5:23 12:17 13:21 23:9 26:10 28:15 59:3 92:3 179:5 181:5 182:2,24 183:2,4,12 <b>seant</b> 28:20 <b>seantrende</b> 26:11 28:19 <b>search</b> 27:11 58:15 <b>second</b> 7:20 8:5 35:8 50:7 54:20 58:22 70:12 72:13 80:2 93:3 109:18 139:13 142:5 161:20 <b>section</b> 36:14 85:10 86:25 87:4 93:23 109:13 113:22 115:8 116:17 152:9 153:24,25 154:4 154:15,16,25 155:6 <b>sections</b> 152:12 <b>see</b> 12:9,10 13:23 14:11 35:3 38:5 47:22 58:17,22 61:16 62:18 63:4 64:8,15 65:6 66:7 66:16,18,20,23 69:13 71:14,17 72:14,15 73:15 85:24 91:24 95:16 96:9,10 99:11 104:3 107:10 109:3,12 113:11 114:1,22 117:15 117:16,17,18,19	119:18 123:18 124:1 128:20 129:1 133:11 134:8 135:5 138:7 138:8 140:20 142:9,15 150:17 150:20 154:1,1 156:10,13 161:23 <b>seed</b> 103:25 <b>seeing</b> 163:5 <b>seeking</b> 156:3 <b>seeks</b> 159:21 <b>seen</b> 13:1 89:21 90:5,9 <b>sees</b> 103:13,15 <b>select</b> 119:6 150:2 <b>selected</b> 106:10,16 119:9 <b>senate</b> 3:6 4:24 61:23 177:13 <b>senator</b> 82:15,17 85:13 <b>send</b> 27:16 31:16 38:14 40:18,20 41:5,8 42:11 62:7 62:11,13 64:16 176:18,25 <b>sense</b> 6:14 22:11 116:11 <b>sent</b> 13:2 27:6,24 42:15 64:10 181:14 <b>sentence</b> 33:8,10 34:16 78:17 85:15 85:22 88:4 103:15 118:25 143:5 <b>separate</b> 43:2 <b>separating</b> 146:8 <b>september</b> 82:16 82:16
<b>s</b>			
<b>s</b> 2:15 26:10,14 49:4 55:20 62:4 87:9 96:8 114:24 179:14 182:3 <b>sake</b> 6:21 <b>samantha</b> 2:10 5:9 <b>sample</b> 98:23 99:20 100:11 102:15 103:21 104:9,10 105:13 108:14,18,20 109:5 111:18 112:5,6 116:12 120:12 136:25 <b>sampled</b> 99:25 105:5,9,15 108:5 109:19,24 111:11 115:23 <b>samples</b> 104:7 <b>sampling</b> 98:14 100:19,25 101:4 101:19 102:14 105:12 110:3,12 110:19,24 113:20 115:1 116:21,24			

[sequential - specifically]

Page 28

<b>sequential</b> 48:20 127:6 <b>sequentially</b> 73:6 <b>seriously</b> 147:22 <b>serve</b> 76:4 <b>served</b> 166:5 <b>set</b> 52:10 72:14 103:25 169:1 <b>settled</b> 73:7 <b>shape</b> 17:7 119:19 <b>share</b> 12:8 38:16 95:12 174:5 <b>sharing</b> 12:24 106:2 <b>shaw</b> 11:2 69:8,10 <b>sheet</b> 181:11 <b>shifted</b> 154:10 <b>shocked</b> 53:11 <b>short</b> 62:21 93:23 151:10,11,12,12 <b>shorter</b> 20:21 <b>shortly</b> 172:7 <b>show</b> 21:24 34:21 73:14 85:9,13,16 90:20 100:9 107:18 109:14 133:6 150:4 <b>showed</b> 39:17 76:20 <b>showing</b> 82:20,22 83:1 84:23 85:25 86:22 133:5 164:22 <b>shows</b> 28:20 <b>side</b> 37:3 51:8 57:7 <b>sign</b> 176:7,14,16 177:18 181:12 <b>signature</b> 178:23 <b>signed</b> 11:16 64:16 174:11 181:20	<b>significant</b> 161:11 164:23 165:4 <b>signing</b> 176:11 <b>sim</b> 145:2 <b>similar</b> 110:19 113:23 114:9 120:18 122:9,10 135:11,24 136:22 137:2 138:6,20,23 <b>similarly</b> 7:8 9:22 <b>simply</b> 9:10 100:4 102:19 128:19 143:5 158:14,15 165:5 <b>simulate</b> 113:5 <b>simulated</b> 134:23 141:25 <b>simulation</b> 37:7 97:13,13,17 98:10 111:24 112:7 122:19 136:5 164:5,15,18 <b>simulations</b> 30:11 32:12 43:13 45:10 48:15,23 49:8 51:19 62:21 81:18 81:20 87:18 88:14 89:16 96:24 102:9 114:19 122:13 127:11,13 136:2 144:15 145:4,18 163:3,5,14 164:7 164:9,12 165:3 <b>simultaneous</b> 83:22 100:7 102:21 103:11 131:2 137:11 139:14 159:24 160:1 168:15 <b>single</b> 129:12 167:12 170:2	<b>sir</b> 96:21 139:17 <b>sitting</b> 8:13 <b>six</b> 28:12 103:17 104:13 105:10 108:11,13,18 142:19 <b>skenny</b> 3:12 <b>skill</b> 46:3 <b>skimmed</b> 21:13,18 <b>skip</b> 133:17 138:4 <b>skipped</b> 96:9 <b>slate</b> 123:19,25 124:13 <b>slight</b> 114:2 <b>slightly</b> 49:1 114:6 <b>slits</b> 160:11 <b>small</b> 121:24 135:15 143:2 <b>smaller</b> 137:25 <b>smc</b> 51:22 52:19 52:21 <b>social</b> 28:4,22 <b>software</b> 112:25 119:5 120:17 <b>solutions</b> 181:23 <b>somil</b> 2:4 4:13 <b>son</b> 172:14 173:1 <b>son's</b> 44:10 <b>soon</b> 172:10 <b>sorry</b> 14:10 19:7 20:12 21:25 22:16 23:9,14 25:14 27:10 31:6 37:14 38:17 40:2 44:14 54:2,19 58:24 68:20 72:13,14 75:24 83:23 85:24 90:11 95:23 100:21 101:16 102:2 106:5 108:15 109:17	111:15 112:2 117:10 118:21 126:17 128:23 130:19 136:4 138:5 139:8,8,11 142:6 144:20 160:3 164:11,24 168:16 176:8,10 176:20 <b>sort</b> 37:7 47:19 54:8 97:11 <b>sound</b> 23:10 154:5 <b>sounded</b> 81:17 <b>sounds</b> 21:17 <b>source</b> 72:21 <b>south</b> 1:2,4 2:2 3:2 3:3,13,17 4:5 10:16 11:6,18 18:3,6 59:22 60:4 96:5 143:20 146:8 160:14 178:4,13 181:4 182:1 183:1 <b>southwest</b> 124:14 <b>spatial</b> 30:9 32:23 35:13,13,21 <b>speak</b> 6:17 8:24 17:20,25 18:14 126:24 151:23 <b>speaking</b> 9:4 47:5 83:22 84:23 85:3 100:7 102:21 103:11 116:2 128:13 129:10 131:2 137:11 139:14 159:24 160:1 168:15 <b>special</b> 43:21 44:8 44:10 52:24 97:6 <b>specific</b> 125:5 <b>specifically</b> 175:10
--	---	---	--

[specify - sure]

Page 29

<p><b>specify</b> 84:4</p> <p><b>spell</b> 26:7 58:16</p> <p><b>spelling</b> 26:9</p> <p><b>spend</b> 33:9 47:1 105:22</p> <p><b>spit</b> 112:3</p> <p><b>split</b> 111:13,16,25 112:1,6,9,11 155:24 159:2,25</p> <p><b>splits</b> 156:4 157:8 158:4 159:21 160:9</p> <p><b>spoke</b> 18:17 23:16 176:8</p> <p><b>spreadsheets</b> 15:19</p> <p><b>squares</b> 36:18,20</p> <p><b>stand</b> 84:20 164:3</p> <p><b>standard</b> 4:3 128:17 130:10 132:1 137:20,24 140:2,2,13,14 141:12,13 142:19 143:12 145:11 146:1,20 177:15</p> <p><b>standing</b> 84:20</p> <p><b>stands</b> 80:4</p> <p><b>start</b> 14:18,25 114:18 144:20</p> <p><b>started</b> 6:3 14:20 16:21 18:24 36:19 61:23 94:10 95:14</p> <p><b>starting</b> 21:9 85:22 98:8 133:6</p> <p><b>starts</b> 69:16 152:10 154:4,16 163:22</p> <p><b>stata</b> 54:21,21,25 55:8,15,19,24,25 56:6,8,9</p>	<p><b>state</b> 1:4 2:2 4:6 10:16,17 11:5,15 11:17 13:8 18:3 31:11 34:19 55:19 57:22 61:23 63:23 66:11 67:23 68:2 75:11 81:15 88:24 119:21 178:4 181:4 182:1 183:1</p> <p><b>stated</b> 133:20</p> <p><b>statement</b> 160:17</p> <p><b>states</b> 1:1 67:3,17 68:3,14 89:2 115:20,24</p> <p><b>static</b> 7:22</p> <p><b>stating</b> 5:21</p> <p><b>statistical</b> 167:25</p> <p><b>statistically</b> 161:11 163:8 164:22 165:4</p> <p><b>statistics</b> 30:10 32:23 49:22 55:11 116:10</p> <p><b>stayed</b> 22:23 23:4 160:23</p> <p><b>stays</b> 161:2</p> <p><b>stephen</b> 3:8 4:23 177:12</p> <p><b>stick</b> 121:25</p> <p><b>stiffed</b> 25:12</p> <p><b>stipulate</b> 37:3,4 127:12 129:16</p> <p><b>stipulated</b> 174:8</p> <p><b>stipulation</b> 60:13 67:8</p> <p><b>stop</b> 172:15</p> <p><b>stopped</b> 12:24</p> <p><b>story</b> 138:6,20,24</p> <p><b>straightforward</b> 43:18</p>	<p><b>strata</b> 54:11,12,15</p> <p><b>street</b> 2:6,11,16,20 3:2,16</p> <p><b>strende</b> 26:13,24</p> <p><b>strike</b> 84:1</p> <p><b>strivedi</b> 2:7</p> <p><b>stronger</b> 127:18 128:8</p> <p><b>struck</b> 148:2</p> <p><b>students</b> 32:5</p> <p><b>studied</b> 123:17</p> <p><b>studies</b> 124:20</p> <p><b>study</b> 78:14,21</p> <p><b>studying</b> 124:7</p> <p><b>stuff</b> 15:13,16 61:23 173:7</p> <p><b>subdivision</b> 157:4 157:11</p> <p><b>submission</b> 152:5 180:22</p> <p><b>submit</b> 87:23</p> <p><b>submittal</b> 83:14</p> <p><b>submitted</b> 14:15 58:18 59:14,18 60:7,9 61:4,19 75:20 79:17 80:19 81:8,13,17 83:14 87:14,17 88:1,18 88:20 90:10</p> <p><b>subscribed</b> 183:14</p> <p><b>subsection</b> 174:24</p> <p><b>substance</b> 15:17</p> <p><b>substantially</b> 114:9 122:9</p> <p><b>substantive</b> 8:25 15:10,12,16 22:11 22:24 152:2</p> <p><b>substitute</b> 76:4</p> <p><b>sufficient</b> 77:16,21 78:7</p>	<p><b>suggest</b> 102:5 120:11 123:23,24 137:13 163:6 166:21</p> <p><b>suggested</b> 81:22 86:21 127:5</p> <p><b>suggesting</b> 93:11 93:12</p> <p><b>suggests</b> 86:14</p> <p><b>suite</b> 2:20 3:3,16</p> <p><b>summarize</b> 69:9 127:7 143:11 155:12</p> <p><b>summary</b> 153:12</p> <p><b>summer</b> 30:2,2</p> <p><b>sumter</b> 110:22,23 111:10,16 112:3 141:7</p> <p><b>sunday</b> 43:20</p> <p><b>support</b> 144:6,7</p> <p><b>supporting</b> 124:20</p> <p><b>suppose</b> 33:21 165:8</p> <p><b>supposed</b> 9:9 88:3 88:15,16</p> <p><b>supreme</b> 79:10 80:23 86:15,22 91:10</p> <p><b>sure</b> 6:9 7:9 16:11 22:11,12 27:21 28:10 48:12 54:23 56:1,6,20 62:13 64:12,14 71:12,13 73:13 77:22 84:19 85:18,18 87:21 89:10,10,11 90:1 100:22 105:8 112:22 117:24 128:16 136:9 148:11 152:24 154:7,23 161:20</p>
--	--	---	--

[sure - think]

Page 30

169:7,8,24 177:7 <b>surely</b> 110:6 <b>surprise</b> 53:7 80:16 122:18 137:23 140:15 <b>surprising</b> 116:11 136:1,23 <b>surrebuttal</b> 88:11 <b>surrounding</b> 153:14 <b>survey</b> 68:2 <b>survived</b> 81:1 <b>swear</b> 4:11 5:13 <b>switch</b> 39:23 40:4 <b>sworn</b> 5:16 183:14 <b>sykes</b> 81:12,23 82:16,17 85:13 93:17 <b>system</b> 90:6 <b>szelgia</b> 62:4	151:17 171:20 <b>takes</b> 157:24 <b>talk</b> 6:25 32:4,5 64:5,6,25 70:10 74:3 126:1 134:7 138:18 <b>talked</b> 21:6 31:25 51:9 61:17 126:8 145:20 <b>talking</b> 11:12 135:14 136:20 137:10 144:8 166:16 <b>target</b> 128:10,14 128:20 129:1,7 <b>tb</b> 155:1 <b>teach</b> 43:19 48:13 48:23,23 52:2 166:11 <b>team</b> 49:9 52:13 144:2 <b>tech</b> 7:21 8:1 142:6 <b>technical</b> 23:8 <b>tell</b> 8:8,17 9:17,23 12:8 26:7 35:9 49:6 54:25 74:25 86:7 127:3 129:6 131:8 133:14,21 152:25 161:7 172:4 <b>tells</b> 53:17 120:6 <b>temporal</b> 35:13 <b>ten</b> 19:24 20:13 98:18,19 99:7,7 99:16,19,20 100:1 100:2,11,14,19,25 101:3 102:15,16 103:16 104:3,7,10 104:15,18,22 105:5,10,12,15	106:10,17 108:5 108:19 109:4,19 109:24 110:19,23 111:1,11,18,25 112:5 113:20 115:1 116:24 117:5,21 151:13 <b>tens</b> 20:20 <b>tense</b> 32:20,25 <b>term</b> 33:22 45:4 120:2 <b>terms</b> 113:2 119:13 165:9 <b>terribly</b> 116:11 <b>test</b> 67:13 <b>testified</b> 5:16 56:25 65:15 69:18 174:18 <b>testify</b> 25:8 72:23 <b>testifying</b> 5:25 <b>testimony</b> 65:16 66:4 68:22 69:6 87:8 88:9 174:13 174:15 175:18,19 175:21 181:9,18 183:8 <b>text</b> 27:25 138:20 150:17 <b>texts</b> 27:16 <b>thank</b> 5:19 86:20 94:23 118:3 151:11 152:8 171:23 173:11 177:8,11,16 <b>thankfully</b> 52:13 <b>thanks</b> 66:17 95:21 <b>theory</b> 128:9 <b>thereof</b> 178:10 <b>thing</b> 53:15,21 65:25 106:13	121:18 138:3 142:23 165:9 <b>things</b> 6:8 16:9,21 26:25 30:3 34:8 43:14 116:12 125:2 144:6 145:17 146:10 147:1,12 171:3 <b>think</b> 7:3 10:2 13:17 15:10,21 18:23 20:9,11,18 22:21 23:9 26:10 26:18 27:18,20,21 28:19 33:2 37:2 41:7 44:18 48:11 49:25 50:1 51:2 51:17,22 52:6,21 53:1 55:22 60:20 61:2,5,7 62:2,4 63:3,7 64:9 68:16 69:7 71:8,10 73:6 73:7 74:20 75:13 79:24,24 80:1,9 80:15,25,25 81:13 83:16,17,17,24 84:6,7,7,11,12,13 84:15 85:4,5,25 87:2 88:6,8 89:8 89:18 90:4,5 91:13 92:24 93:11 93:21 96:21 97:23 98:3,23 99:3 102:8,13 103:7,12 103:12,16,16 104:24 105:9 107:9 114:7,17 115:17 116:10,12 119:12 120:9 122:11 124:1 125:1 129:21 130:15,15 131:7
<b>t</b>			
<b>t</b> 26:11,14 49:4 55:20,20 179:14 182:3,3 <b>table</b> 72:24 <b>tabs</b> 161:25 <b>take</b> 6:18 8:13,16 8:20 14:6 58:12 60:6,12,15 67:8 85:12 91:22 93:23 94:1 95:12 106:9 109:23 111:18 120:1 126:15,16 129:14 147:22 151:10 155:20 157:6,15 158:11 158:15,21 160:7 171:13 <b>taken</b> 1:16 8:5 82:25 94:4 108:14 108:18 126:19			



[think - twice]

Page 31

131:19,24,25	63:6 66:1 71:5	181:6,20 183:5,8	70:9 74:2 77:7
132:3,16,20,25	78:20 79:16 94:5	<b>traveled</b> 43:20	87:1 90:19 94:8
138:15,15 139:21	95:11,12 123:18	<b>traveling</b> 44:6,12	94:23 95:2 112:21
140:4 141:3,5	126:17,20 127:12	<b>travelling</b> 44:8	116:15 126:22
145:1,3 147:9,11	139:17 142:7	<b>traverse</b> 159:1	151:20 152:7
148:10 149:7,11	151:11,15,18	<b>traversing</b> 159:9	156:8 158:8
149:13,14,15,16	155:4,11 171:7,17	<b>treated</b> 74:15	159:11 160:18
150:1 152:22	171:21 173:2	<b>trende</b> 1:11 4:5	162:24 164:13
153:15 154:22	176:3 181:19	5:15,19,23 12:17	170:25 171:16
155:9 157:19,24	<b>timeframe</b> 181:8	13:13,22 28:15	172:23 174:19
159:6,17 165:15	<b>timely</b> 171:3	34:25 38:7,13,19	175:23 177:3,8
168:12,21,22	<b>times</b> 7:5 10:5	57:25 58:22 59:3	179:7
169:4,6 170:20	14:8 18:20 19:4	65:6 66:7 67:2,15	<b>trouble</b> 6:25 169:7
174:5 175:4	19:19 20:3,6	69:18 71:23 72:19	<b>true</b> 17:2 57:11
<b>thinks</b> 166:8	23:15 139:11	73:20 82:14 87:6	58:12 78:12,19,22
<b>third</b> 18:13 80:2	165:15	91:24 92:3,9	78:23,24 79:13
91:3	<b>title</b> 133:13	93:25 94:9 95:4,4	96:17 104:17
<b>thirty</b> 136:10	<b>titles</b> 104:4	126:23 151:21	148:12 154:23
<b>thomas</b> 1:7 3:6 4:7	<b>tjh</b> 1:6	170:22 171:3,24	159:17 163:17
4:24 181:4 182:1	<b>today</b> 5:25 6:4	172:5,22 173:13	178:6 183:8
183:1	8:13 13:1 21:22	173:21 174:23	<b>truth</b> 8:9,9,9
<b>thoroughly</b> 34:22	24:21 109:7 171:1	175:2 179:5,18,20	<b>truthful</b> 53:24
<b>thought</b> 84:2 85:2	171:24	179:22 180:1	<b>truthfully</b> 6:4
86:22 88:23 91:4	<b>today's</b> 4:3	181:5 182:2,24	<b>try</b> 139:19
93:17 136:10	<b>toggling</b> 54:20	183:2,4,12	<b>trying</b> 11:11 42:23
138:1 140:16	<b>told</b> 23:18,25	<b>trende's</b> 71:21	77:17 119:6
153:8	172:6,8,13	76:3 172:14,25	124:12 127:7
<b>three</b> 26:5 33:15	<b>tool</b> 47:23	<b>trende.30</b> 26:12	137:13 147:13
34:8 36:16 44:22	<b>top</b> 36:8 51:1	<b>trendesean</b> 26:17	153:20 157:17
80:9 81:1 86:3	68:20 85:7 133:7	<b>trial</b> 25:8,8 65:16	158:20,23 159:13
130:22 135:7	138:13 156:13	69:18 174:18	168:18
<b>time</b> 1:14 4:2,3	166:1	<b>tricky</b> 146:8	<b>turn</b> 15:20,23 16:2
7:13,13,24 10:7	<b>topics</b> 173:19	<b>tried</b> 147:21	16:14,25 27:13
14:9 18:22,25	<b>totality</b> 67:13,21	153:19	45:13 58:7 115:14
19:1 22:23 23:4	<b>tough</b> 135:5	<b>trinkley</b> 3:15 4:21	142:4 173:7
24:9 31:18 33:9	<b>track</b> 146:21	4:21 177:9,9	<b>turned</b> 17:8 45:9
33:21 34:22 37:18	<b>training</b> 124:18,24	<b>trip</b> 42:14	63:11 171:2,2
41:13 42:19 46:8	<b>transcript</b> 3:22	<b>trivedi</b> 2:4 4:13,13	<b>turning</b> 10:13
47:2 54:5 55:5,7	6:13 8:1 94:2	5:12,18 12:6	16:21 163:7
55:14 56:9,11,14	176:23,25 177:14	13:15 35:2 38:12	<b>twice</b> 57:11
56:15,16 60:8,18	177:18 178:6	38:18 58:6 64:24	138:10

<b>twitter</b> 28:5,12,16 <b>twitter.com</b> 28:19 <b>two</b> 17:7 20:19 39:17 40:15 46:3 61:21 62:20 65:9 76:14,19 80:9 83:18 96:1 111:4 113:16,24 114:12 114:25 115:6 121:25 122:5,8 133:21 134:1 142:17 153:18 154:7,7 <b>type</b> 19:11,16 <b>types</b> 129:14 <b>typically</b> 47:20,20 168:22 <b>typo</b> 59:4 118:18 118:20 133:12	13:4,12 34:2 66:10 115:18 119:4 166:20 <b>understanding</b> 6:3 6:8 11:14 13:9 67:19 77:24 81:20 162:23 <b>understood</b> 88:4 170:24 <b>undue</b> 143:2,17 <b>unexperienced</b> 92:10 <b>uniform</b> 98:23 119:14,23 <b>unintentionally</b> 75:18 <b>union</b> 2:3,9 4:14 5:2,8 <b>unique</b> 98:11 102:25 115:17 120:14 <b>united</b> 1:1 115:20 115:24 <b>unnecessarily</b> 161:2 <b>unpack</b> 30:15 32:17 33:10 <b>unquote</b> 134:18 135:10 140:24 151:5 167:5 170:4 <b>untrue</b> 78:17 <b>unusual</b> 67:25 <b>update</b> 60:13 62:8 133:13 <b>updated</b> 79:17 <b>use</b> 11:22 26:5,6 27:10 30:19 35:11 35:13,20 36:18 37:12,14,15 47:21 48:6 49:9,10 50:4 50:8,11,14 51:3	52:3,12,15 55:8 55:12 93:12 98:20 98:22 99:2 113:3 115:19 119:13 120:2 155:17 163:12,17 166:21 <b>useful</b> 52:14 76:3 129:18 <b>useless</b> 132:19 <b>uses</b> 31:20 48:11 48:12,24 96:25 <b>usually</b> 32:4 40:20 <b>utah</b> 69:19,20,24	<b>verbiage</b> 69:5 <b>verify</b> 181:9 <b>veritext</b> 181:14,23 <b>veritext.com.</b> 181:15 <b>version</b> 40:1,4,6,9 40:12,15,21 41:6 42:16 52:22,24 53:17 80:6,8 97:6 161:18 162:5 <b>versions</b> 40:18 <b>versus</b> 4:7 70:12 90:17,23 114:5 180:17 <b>vicinity</b> 95:20 <b>victory</b> 76:5 <b>video</b> 4:4 7:5 21:25 <b>videoconference</b> 1:10 <b>videographer</b> 3:20 4:1 94:1,5 126:16 126:20 151:15,18 171:17,21 176:2 <b>videotape</b> 1:10 <b>view</b> 76:12 <b>virginia</b> 124:10,12 124:14 <b>virtually</b> 150:6 164:16 <b>visually</b> 71:22 <b>vote</b> 159:7 <b>voter</b> 65:12 <b>voters</b> 71:25 77:4 180:14 <b>voting</b> 36:9,17,22 44:15 46:16,21 57:1 65:17 67:22 68:3,5,7,10,15,17 68:23 69:4,6,19 69:25 71:24 72:4
<b>u</b>		<b>v</b>	
<b>u</b> 96:8 <b>uh</b> 6:21 32:19 44:17 53:10 54:13 61:14 75:3 82:8,8 113:10 119:15 <b>um</b> 58:12 97:23 103:24 152:14 <b>unaware</b> 175:17 <b>unclear</b> 54:3 103:19 104:25 <b>unconstitutional</b> 86:23 <b>unconstitutionally</b> 151:1 <b>underlined</b> 12:16 13:20 <b>underneath</b> 36:10 <b>understand</b> 5:24 6:22 7:14,16 8:5 8:14 9:2 10:14,20 11:4,25 12:21		<b>v</b> 38:10 58:2 65:2 65:9 66:11 70:7 72:20,21 73:4,25 74:4,4 75:4 77:2,5 77:9 179:25 180:3 180:9,10,12,14 181:4 182:1 183:1 <b>vacation</b> 148:3 <b>valid</b> 132:23 <b>validate</b> 82:24 <b>validates</b> 84:9 <b>validating</b> 84:19 <b>validity</b> 132:13 <b>vanishingly</b> 143:2 <b>variable</b> 132:12 144:19,22 <b>variably</b> 92:12,22 <b>variety</b> 67:19 <b>various</b> 82:17 126:2 <b>varying</b> 48:12 <b>vector</b> 99:7,10,13 99:14 104:20 105:9 118:1 <b>verb</b> 33:17,20,24 <b>verbal</b> 58:23	



[voting - wrote]

Page 33

<p>91:2 92:4,11,12 92:13,22,22 93:14 154:19 166:5,19 166:25 <b>vra</b> 21:14 67:11 67:14,17 165:18 165:22 166:2,8,10 166:13,16 167:2,6 167:9,11,16,18,21 168:3,6,10,20 170:15 <b>vs</b> 1:6 64:22 180:7 <b>vtc</b> 1:12,18 2:4,5 2:10,11,15 3:1,2,9 3:10,15 <b>vtd</b> 158:2 162:18 165:5 167:17 <b>vtds</b> 158:2,15,21</p>	<p>161:5 166:18 172:1,3,24,25 <b>wanted</b> 26:20 35:21 54:9 67:20 75:14 157:7 172:18 173:10 <b>wants</b> 123:23 <b>washington</b> 2:6,21 3:11 <b>way</b> 33:2 72:14 84:10 87:7,19 89:1 90:13 101:18 102:3 104:5 106:3 107:12 116:6 127:7 128:19 129:18 131:7 147:6,15 148:25 149:2,16 150:3 153:12,19 <b>ways</b> 82:17 128:15 <b>website</b> 46:23 <b>week</b> 16:23,24,24 17:1 29:16,18 42:19 44:20,25 45:19 172:4,8,10 <b>weekend</b> 43:23 44:4 <b>weigh</b> 116:3 <b>weighed</b> 116:4 <b>weight</b> 71:22 72:7 76:13,15,24 115:23 175:20 <b>weighted</b> 36:18,20 <b>weighting</b> 36:12 <b>weights</b> 119:5,7 <b>welcome</b> 118:5 126:23 151:21 <b>went</b> 43:17 69:6 101:13 107:11 136:7 172:2</p>	<p><b>west</b> 111:14,17,21 111:25 112:1,4,7 112:9,11 <b>white</b> 71:25 <b>whitford</b> 73:25 74:4,4 75:2,4 180:10 <b>widely</b> 96:25 <b>wife</b> 22:9 <b>wife's</b> 44:9 <b>win</b> 84:10 147:20 175:12 <b>wipe</b> 123:24 <b>wiped</b> 123:19 <b>wisconsin</b> 74:5,12 74:21,23 75:7 <b>withhold</b> 15:11 16:12 <b>witness</b> 4:12 5:14 25:9 55:20 61:6 64:4 65:15 86:14 86:21 112:16 116:8 139:15,19 158:6 159:6 160:13 162:22 164:11 174:11,11 174:17 176:11,15 177:17 178:11 181:8,10,12,19 <b>women</b> 77:4 180:13 <b>won</b> 76:7 <b>word</b> 26:13 28:19 33:3 39:23 40:10 40:13,16 41:5,9 43:5 45:16,17 49:19 54:15 60:6 89:23 91:22 93:13 108:1 129:20 <b>wording</b> 32:17 111:23</p>	<p><b>words</b> 30:19 71:15 <b>work</b> 26:22 27:16 31:12 36:19 39:20 39:22 41:16 42:18 43:24 47:4 50:12 51:16,24,25 55:9 56:6 58:10 60:25 70:21 72:20 78:16 102:9 147:22 148:21 172:16 <b>worked</b> 41:13 42:13 44:1 51:21 <b>working</b> 30:22 32:8 42:8 59:25 60:17 61:18 64:1 <b>works</b> 119:17 <b>worst</b> 150:19 151:5 <b>worth</b> 92:7 <b>worthy</b> 76:12 <b>write</b> 14:24 15:3 21:9 46:23 47:13 69:1 97:13,17 125:15 <b>writing</b> 14:18,20 18:24 <b>written</b> 46:2 55:18 55:24 78:5 99:5 103:8 123:21 174:10 <b>wrong</b> 65:14 69:21 83:16 84:6 84:14 87:2 88:7 92:23 105:8 107:13,14,14 117:24 140:4 <b>wrote</b> 14:3 80:23 81:19</p>
<p><b>w</b></p>			
<p><b>w</b> 3:15 <b>wait</b> 7:1 100:21,21 100:21 <b>waiting</b> 44:16,24 45:4 <b>waive</b> 177:19 <b>waiving</b> 176:12 <b>walkthrough</b> 23:3 <b>wallace</b> 2:24 4:18 156:16 <b>want</b> 7:25 9:16 18:18,19 19:7 22:17 28:24 30:15 34:19 36:7 38:3 39:16 40:22 41:22 44:13 54:23 58:7 58:13 64:25 65:5 70:10 74:3 84:11 95:3 100:22 119:3 119:25 120:1 133:2 142:14 152:8,17 154:3,6</p>			

[x - zoom]

Page 34

<b>x</b>	<b>year</b> 10:11 50:5 58:8
<b>x</b> 32:7 128:22,23 129:1,2,11 179:1 179:14	<b>years</b> 26:19 28:12 71:4,6 124:8 174:17
<b>xi</b> 82:24 86:2	<b>yep</b> 54:24
<b>y</b>	<b>yesterday</b> 24:14 24:16 172:12
<b>y</b> 25:24 32:7 128:19 134:22	<b>yonkers</b> 149:3
<b>yan</b> 2:5 5:1,1	<b>york</b> 2:12,12,16 2:16 50:23 57:13 57:25 58:4,7,19 59:10,14,21,25 60:3,4,9,21 61:3 64:7 126:8,10 142:5,12 143:13 144:8,11 147:24 148:8,22 149:11 150:11 180:1,5
<b>yeah</b> 14:13 18:11 19:1 22:2 31:20 36:5 43:4,7 51:24 54:1,2,6,23,24 56:10 61:21,21 63:2 64:20 66:5 71:4,20 73:6 74:24 76:2 79:17 82:20 84:2 87:6 87:17 89:25 91:10 91:11 92:18 101:17 102:20 106:5 108:22 109:4 116:8,8 118:18,19 120:24 121:5,11 124:9,17 125:11,14 127:20 128:22 129:9 130:5 131:12 133:12,13 136:7 136:14 138:1,8,9 138:9,15 140:21 144:11 146:13,19 146:24 150:23 151:9 153:15,18 154:2,2,22 155:2 155:7,7,15 156:11 156:12 158:6 159:6,22 160:3 161:16,25 165:8 168:18,18 176:13	<b>yorktown</b> 149:4
	<b>z</b>
	<b>z</b> 32:7 62:4 <b>zoom</b> 4:9 6:16 7:21 12:11 21:20 72:14

Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

DISCLAIMER: THE FOREGOING FEDERAL PROCEDURE RULES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

THE ABOVE RULES ARE CURRENT AS OF APRIL 1, 2019. PLEASE REFER TO THE APPLICABLE FEDERAL RULES OF CIVIL PROCEDURE FOR UP-TO-DATE INFORMATION.

VERITEXT LEGAL SOLUTIONS  
COMPANY CERTIFICATE AND DISCLOSURE STATEMENT

Veritext Legal Solutions represents that the foregoing transcript is a true, correct and complete transcript of the colloquies, questions and answers as submitted by the court reporter. Veritext Legal Solutions further represents that the attached exhibits, if any, are true, correct and complete documents as submitted by the court reporter and/or attorneys in relation to this deposition and that the documents were processed in accordance with our litigation support and production standards.

Veritext Legal Solutions is committed to maintaining the confidentiality of client and witness information, in accordance with the regulations promulgated under the Health Insurance Portability and Accountability Act (HIPAA), as amended with respect to protected health information and the Gramm-Leach-Bliley Act, as amended, with respect to Personally Identifiable Information (PII). Physical transcripts and exhibits are managed under strict facility and personnel access controls. Electronic files of documents are stored in encrypted form and are transmitted in an encrypted fashion to authenticated parties who are permitted to access the material. Our data is hosted in a Tier 4 SSAE 16 certified facility.

Veritext Legal Solutions complies with all federal and State regulations with respect to the provision of court reporting services, and maintains its neutrality and independence regardless of relationship or the financial outcome of any litigation. Veritext requires adherence to the foregoing professional and ethical standards from all of its subcontractors in their independent contractor agreements.

Inquiries about Veritext Legal Solutions' confidentiality and security policies and practices should be directed to Veritext's Client Services Associates indicated on the cover of this document or at [www.veritext.com](http://www.veritext.com).